EB-2024-0331

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Electricity Act, 1998*, S.O. 1998, c. 35 (the "**Electricity Act**" or "**Act**");

AND IN THE MATTER OF an Application by Capital Power Corporation, Thorold CoGen L.P., Portlands Energy Centre L.P. dba Atura Power, St. Clair Power L.P., TransAlta (SC) L.P. (collectively, the "**NQS Generation Group**" or "**Applicants**") for Review of Amendments to the Independent Electricity System Operator Market Rules

IESO AUTHORITIES BRIEF

January 13, 2025

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2.	*R. v. Mohan,* 1994 CanLII 80 (SCC)
3.	*White Burgess Langille Inman v. Abbott and Haliburton,* 2015 SCC 23
4.	*Bruff-Murphy v. Gunawardena,* 2017 ONCA 502
5.	*R. v. Abbey,* 2017 ONCA 640
6.	*Fellowes, McNeil v. Kansa General International Insurance Co.,* 1998 CanLII 14856 (ON SC)
7.	*M.M. v. R.M.,* 2016 ONSC 7003
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10.	*R. v. Delchev,* 2015 ONCA 381
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Ontario Energy Board
Commission de l'énergie de l'Ontario

DECISION AND ORDER

EB-2016-0152

ONTARIO POWER GENERATION INC.

Application for payment amounts for the period from January 1, 2017 to December 31, 2021

BEFORE: Christine Long
Vice Chair and Presiding Member

Cathy Spoel
Member

Ellen Fry
Member

December 28, 2017

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1 INTRODUCTION AND SUMMARY

This is a decision of the Ontario Energy Board (OEB) in response to an application filed by Ontario Power Generation Inc. (OPG) on May 27, 2016 seeking approval for changes in payment amounts for the output of its nuclear generating facilities and most of its hydroelectric generating facilities.

OPG is the largest electricity generator in Ontario. Provincial regulation requires that the OEB set the payment amounts that OPG charges for the generation from its nuclear facilities (Pickering and Darlington) and most of its hydroelectric facilities (including Sir Adam Beck I and II on the Niagara River, and RH Saunders on the St. Lawrence River). These payment amounts are included in the electricity costs which are shown as a line item on a customer's electricity bill sent from the customer's local electricity distributor.

The OPG application sought approval of $16,800 million of revenue requirement[1] over the period 2017 to 2021 for the nuclear facilities,[2] and approval of an inflation and productivity based formula for the determination of payment amounts for the hydroelectric facilities from 2017 to 2021.

In terms of the dollar amounts at issue, and the amount of supporting evidence, this was the largest rate case the OEB has ever heard. The OEB was assisted by the participation of 20 intervenors who represent a range of customer and other stakeholder interests, and OEB staff. The OEB was also assisted by 12 letters of comment received from customers.

OPG's application seeks approval for payment amounts to be effective January 1, 2017 and for each following year through to December 31, 2021. If the application and a smoothing proposal were approved as filed, OPG calculated that the typical residential customer's bill would increase by $0.65 a month in each year from 2017 to 2021.[3] The smoothing proposal would defer recovery of $1,005 million plus $116 million of interest to a future period.

Highlights of this Decision include:

[1] The revenue requirement is the total cost for a utility to provide energy service. It includes the cost of salaries, equipment, capital projects, depreciation, taxes, interest and a return on the equity invested by shareholders. The revenue requirement is used to set rates for customers.
[2] The revenue requirement is adjusted by the productivity stretch proposed by OPG and reviewed in section 8.2 of this Decision.
[3] Application as amended on March 8, 2017, Exh N3-1-1. The bill impact calculation was performed before the Government of Ontario's Fair Hydro Plan (discussed below) was implemented.

- Reduction in OPG's proposed Operations, Maintenance and Administration budget for the nuclear business, mainly due to the results of poor OPG performance against its comparators, and excessive compensation when compared to its benchmarked comparators and its own performance, and other excessive costs. The reductions total $100 million per year
- Approval of OPG's application relating to the Darlington Refurbishment Program, including the addition of $4,800 million to rate base in 2020 when the first of the four units to be refurbished is expected to come back online
- Reduction of an estimated $33 million relating to the rate base additions of two nuclear operations capital projects based on an analysis of forecast and actual costs
- Approval of OPG's proposal to spend $292 million over the period 2017 to 2020 to pursue technical assessments related to extending operation of Pickering beyond 2020
- A requirement for higher productivity expectations underpinning the setting of nuclear payment amounts
- Approval of the hydroelectric payment amount setting formula, with one exception on the calculation of the inflation factor
- Rejection of OPG's proposal to change its debt/equity ratio from 55:45 to 51:49
- Approval of the nuclear production forecast as proposed
- Effective date for the new payment amounts will be June 1, 2017, rather than January 1, 2017 as proposed by OPG

The next step in the process will be for OPG to calculate the payment amounts in a manner that reflects these and other findings of the OEB, and to propose a way to smooth them out in accordance with the regulatory requirement to defer the collection of some of the revenue. Other parties will have an opportunity to make submissions, and the OEB will then make a finding on the final smoothed payment amounts. Only then will the exact payment amounts and customer bill impacts be known.

The impact of this Decision will not be seen on customer bills immediately due to smoothing and deferred revenue resulting from this proceeding. In addition, because of the Fair Hydro Plan, for residential customers and some other customers, the immediate impact will be lessened.

2 PAYMENT AMOUNTS DETERMINATION BY THE OEB

2.1 Legislative Requirements

Section 78.1 of the *Ontario Energy Board Act, 1998* (the Act), which is reproduced in Schedule A of this Decision, establishes the OEB's authority to set the payment amounts for the prescribed generation facilities. Section 78.1(4) states:

> The Board shall make an order under this section in accordance with the rules prescribed by the regulations and may include in the order conditions, classifications or practices, including rules respecting the calculation of the amount of the payment.

Section 78.1(5) states:

> The Board may fix such other payment amounts as it finds to be just and reasonable,
>
> (a) on an application for an order under this section, if the Board is not satisfied that the amount applied for is just and reasonable; or
> (b) at any other time, if the Board is not satisfied that the current payment amount is just and reasonable.

Ontario Regulation 53/05 (Payments Under Section 78.1 of the Act) (O. Reg. 53/05) provides that the OEB may establish the form, methodology, assumptions and calculations used in making an order that sets the payment amounts. O. Reg. 53/05 also includes detailed requirements that govern the determination of some components of the payment amounts. O. Reg. 53/05 can be found at Schedule B of this Decision.

O. Reg. 53/05 was amended on November 27, 2015 with new requirements related to "making more stable the year-over-year changes" in the nuclear payment amount during and following the $12.8 billion Darlington Refurbishment Program. The regulation was further amended on March 2, 2017, just before the hearing began, with the objective of smoothing the weighted average payment amounts (WAPA). The WAPA is comprised of hydroelectric and nuclear payment amounts and riders.

2.2 Memorandum of Agreement

OPG has entered into a Memorandum of Agreement with its shareholder, the Province of Ontario. This Memorandum sets out the shared expectations of OPG and its shareholder regarding OPG's governance, mandate, reporting, performance expectations and communications. Included in the provisions related to performance are expectations regarding efficiency and cost-effectiveness, and the expectation that OPG will undertake periodic benchmarking appropriate for its operations and type of assets, including as part of its submissions to the OEB. The Memorandum of Agreement is reproduced at Schedule C of this Decision.

2.3 The Regulated Generation Facilities

OPG owns and operates both regulated and unregulated generation facilities. As set out in section 2 of O. Reg. 53/05, the regulated, or prescribed, facilities consist of 54 regulated hydroelectric generating stations, 48 of which are organized in four plant groups, and two nuclear generating stations. The regulated facilities produce about half of the electricity consumed in Ontario.

Table 1: Regulated Generation Facilities

Hydroelectric				Nuclear	
Station	MW	Plant Group	MW	Station	MW
Sir Adam Beck I	427	Ottawa St. Lawrence	1,526	Pickering Units 1&4	1,030
Sir Adam Beck II	1,499	Central Hydro	108	Pickering Units 5-8	2,064
Sir Adam Beck PGS	174	Northeast	818	Darlington	3,512
DeCew Falls I	23	Northwest	658		
DeCew Falls II	144				
RH Saunders	1,045				
TOTAL	**3,312**		**3,110**		**6,606**

In 2010, the operations of Pickering Units 1 and 4 (formerly referred to as Pickering A) and Pickering Units 5 - 8 (formerly referred to as Pickering B) were amalgamated into a single station.

OPG also owns the Bruce A and B nuclear generating stations. These stations are leased on a long term basis to Bruce Power L.P. Under section 6(2)9 of O. Reg. 53/05, the OEB must ensure that OPG recovers all the costs it incurs with respect to the Bruce nuclear generating stations. Under section 6(2)10 of O. Reg. 53/05, the revenues from the lease, net of costs, are to be used to reduce the payment amounts for the prescribed nuclear generating stations.

2.4 Previous Payment Amounts Proceedings

This application is OPG's fourth cost forecast based application to set payment amounts. The previous proceedings are listed in the following table. The payment amounts currently in effect were set in the EB-2013-0321 proceeding.

Table 2: Previous Payment Amount Proceedings

File Number	Test Period
EB-2007-0905	2008-2009*
EB-2010-0008	2011-2012
EB-2013-0321	2014-2015

* Test period starting April 1

In addition to cost forecast based applications, OPG has filed applications to establish deferral and variance accounts or to clear the balances in deferral and variance accounts.[4] In the EB-2014-0370 proceeding, the OEB approved payment amount riders to recover the balances in certain deferral and variance accounts. The riders were effective until December 31, 2016.

[4] Variance accounts track the difference between the forecast cost of a project or program, which has been included in rates, and the actual cost. If the actual cost is lower, then the extra money is refunded to customers. If the actual amount is higher, then the utility can request permission to recover the extra amount through future rates. A deferral account tracks the cost of a project or program which the utility could not forecast when the rates were set. When the costs are known, the utility can then request permission to recover the costs in future rates.

3 THE APPLICATION AND PROCESS

3.1 The Application

This is the first incentive rate-setting (IR) application for OPG's nuclear and regulated hydroelectric generating facilities. In a letter dated February 17, 2015, the OEB stated that it expected OPG to develop an IR framework for the regulated hydroelectric facilities and a Custom IR framework for the nuclear facilities based on the principles outlined in the *Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach* (RRFE, now referred to as RRF). The OEB stated that a five-year application was expected.

OPG's application sought approval for hydroelectric payment amounts to be effective January 1, 2017 and approval of the formula used to set the hydroelectric payment amount for the period January 1, 2017 to December 31, 2021. The application sought approval for nuclear payment amounts to be effective January 1, 2017 and for each following year through to December 31, 2021.

On December 8, 2016, the OEB issued an order declaring the current hydroelectric and nuclear payment amounts interim as of January 1, 2017, pending the OEB's final determinations in this proceeding.

OPG applied for hydroelectric payment amounts that would be determined mechanistically by Price Cap Incentive Rate-setting (Price Cap IR) for the five-year period from 2017 to 2021.[5] OPG proposed a hydroelectric generation industry inflation factor, a hydroelectric generation industry productivity factor, and a stretch factor based on OPG's hydroelectric benchmark performance. OPG expects to file annual price-cap adjustment applications in the fall of each year to set the next year's hydroelectric payment amount. In this application, OPG seeks approval of the hydroelectric payment amount to be effective January 1, 2017, and a rider to clear the audited 2015 deferral and variance account balances over a two-year period. The proposed payment amount and rider are summarized below. The 2016 payment amount and rider are provided for reference.

[5] Price Cap IR is the standard formulaic method by which utility rates are annually adjusted during the incentive rate-setting period between cost of service applications. The formula adjusts current rates for the following year by inflation in input prices (costs of production or service) less expected productivity improvements including a stretch factor.

Table 3: Hydroelectric Payment Amounts and Riders

$/MWh	2016	2017
Hydroelectric Payment Amount	41.09	41.71
Hydroelectric Rider	3.83	1.44

OPG applied for 2017 to 2021 nuclear payment amounts under a Custom IR[6] framework that is based on the principles of the RRF and that is tied to OPG's total cost benchmarking performance for the nuclear business. The application is underpinned by OPG's 2016-2018 business plan and includes a smoothing proposal based on WAPA. In the period 2017 to 2021, $1,005 million would be deferred. The proposed revenue requirement for the nuclear business, as updated on March 8, 2017, is summarized in the following table.

[6] The Custom IR methodology sets rates for five years considering a five-year forecast of the utility's costs and sales volumes. This method is intended to be customized to fit the specific utility's circumstances, but expected productivity gains will be explicitly included in the rate adjustment mechanism. Utilities adopting this approach will need to demonstrate a high level of competence related to planning and operations.

Table 4: Proposed Nuclear Revenue Requirement

	$million	2017	2018	2019	2020	2021
	Expenses					
1	OM&A[1]	2,346.0	2,351.4	2,425.1	2,469.0	2,349.1
2	Nuclear Fuel	218.2	219.9	232.1	224.4	209.1
3	Depreciation	367.0	395.0	400.3	541.2	316.7
4	Property Tax	14.6	14.9	15.3	15.7	17.0
5	Income Tax	(6.7)	(18.4)	(18.4)	59.2	(5.0)
	Cost of Capital					
6	Short-term Debt	0.8	1.0	1.1	1.8	1.8
7	Long-term Debt	76.8	73.6	71.2	163.3	173.7
8	Return on Equity	133.5	136.0	133.7	308.1	328.6
9	Adjustment for lesser of UNL or ARC[2]	25.9	22.1	18.3	14.5	12.4
10	Other Revenue	31.7	22.0	22.7	22.2	22.9
11	Bruce Net Revenue	(16.9)	(17.1)	(27.4)	(23.8)	(38.1)
12	Revenue Requirement	3,161.3	3,190.6	3,283.4	3,798.8	3,418.4
13	Stretch Factor Reduction Amount		5.0	10.2	15.3	20.6
14	Deferred Revenue Requirement	251.0	162.0	(38.0)	488.0	142.0
16	Smoothed Revenue Requirement	2,910.3	3,028.6	3,321.4	3,310.8	3,276.4
16	Deferral and Variance Accounts	108.9	108.9			

Source: Exh N3-1-1 page 14 and Attachment 3

Note 1: Operations, Maintenance and Administration Costs

Note 2: UNL - unfunded nuclear liability, ARC - asset retirement cost

The proposed nuclear payment amounts, based on the smoothed revenue requirement, and the proposed rider to clear the audited 2015 deferral and variance account balances over a two-year period are summarized in the following table. The 2016 payment amount and rider are provided for reference.

Table 5: Nuclear Payment Amounts and Riders

$/MWh	2016	2017	2018	2019	2020	2021
Nuclear Payment Amount	59.29	76.39	78.6	84.83	88.21	92.02
Nuclear Rider	13.01	2.85	2.85			

A summary of the approvals that OPG is seeking in this application is found at Schedule D of this Decision.

3.2 The Process

The application as filed on May 27, 2016 was based on smoothing of the nuclear payment amounts. If approved, OPG stated that the application would result in an increase each year of $1.05 on the monthly total bill for a typical residential customer consuming 750 kWh per month.[7] A Notice of Application, issued on June 29, 2016, was published in 82 newspapers throughout the province.

Twenty parties applied for and were granted intervenor status. Twelve letters of comment were filed with the OEB in response to OPG's application. The letters expressed concern about the request to increase payment amounts and the difficulty that customers face in paying current electricity bills without any additional increase. Although the OEB will not address each letter specifically, the comments have been taken into account in the OEB's deliberations.

Over the course of the proceeding, the evidence was amended, supplemental evidence was filed, and three impact statements were filed. The last impact statement was related to the March 2, 2017 amendment to O. Reg. 53/05. As noted in the introduction, OPG's final proposal, based on smoothing of WAPA, would result in an increase each year of $0.65 on the monthly total bill for a typical residential customer, all else being equal. The increase relates to this application only. Customers' bills will also be impacted by other factors such as their distribution rates, transmission rates, and the overall bill reductions implemented through the Government of Ontario's Fair Hydro Plan.

The discovery phase for this proceeding included interrogatories and a technical conference. A settlement conference was held and settlement was achieved on some, mostly secondary, issues. The OEB approved the settlement proposal on March 20, 2017.[8] The settlement is attached as Schedule G to this Decision. The oral hearing took place over 23 days during the period from February 27, 2017 to April 13, 2017. The record closed on June 19, 2017 with the filing of OPG's reply argument.

During the proceeding, OPG sought confidential treatment for 173 documents. The OEB reviewed the documents and made determinations on the redacted text or the entire document as required.

Details of the procedural aspects of the proceeding are provided in Schedule E of this Decision.

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[7] This is the impact identified by OPG in its original filing. OPG subsequently amended its application and revised the impact to $0.65 as noted earlier in this Decision. Both calculations were made before the Fair Hydro Plan was implemented.

[8] Tr Vol 9 page 1.

4 STRUCTURE OF THE DECISION

As part of its application, OPG filed a draft issues list. The OEB made provision for submissions on the list as well as prioritization of the issues as primary issues, which would proceed to oral hearing if unsettled, and secondary issues, which would proceed to written hearing if unsettled. The issues list was revised throughout the proceeding as discovery evolved. The issues list provided the structure for the interrogatories, settlement and oral hearing. The Final Issues List (Reprioritized) is attached as Schedule F of this Decision.

This Decision addresses the unsettled issues in the detail required to set payment amounts for 2017-2021. The Decision is organized into the following major sections: nuclear production forecast and revenue requirement, capitalization and cost of capital, deferral and variance accounts, methodologies for setting payment amounts, reporting, smoothing and implementation.

The submissions of OEB staff and the following parties are referred to in this Decision:[9]

- Association of Major Power Consumers in Ontario (AMPCO)
- Canadian Manufacturers & Exporters (CME)
- Consumers Council of Canada (CCC)
- Energy Probe Research Foundation (Energy Probe)
- Environmental Defence Canada Inc. (Environmental Defence)
- Green Energy Coalition (GEC)
- London Property Management Association (LPMA)
- Ontario Association of Physical Plant Administrators (OAPPA)
- Power Workers' Union (PWU)
- Quinte Manufacturers Association (QMA)
- School Energy Coalition (SEC)
- Society of Energy Professionals (Society)
- Sustainability-Journal
- Vulnerable Energy Consumers Coalition (VECC)

[9] A full list of all participants can be found in Schedule E. Although not all submissions are specifically referred to in this Decision, all were considered.

5 NUCLEAR FACILITIES

5.1 Nuclear Production Forecast

The historical production and test period production forecast are summarized in the following table. OPG seeks approval of a test period production forecast of 188.3 TWh. OPG also seeks approval of a mid-term review to update the nuclear production forecast for the final two-and-a-half years of the test period.

Table 6: Nuclear Production Forecast

TWh	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Darlington	28.9	26.0	26.5	29.0	28.3	25.1	28.0	23.3	25.7	19.0	19.3	19.7	17.7	16.6
Pickering	19.3	20.8	19.2	19.7	20.7	19.6	20.1	21.2	19.9	19.1	19.2	19.4	19.6	18.8
TOTAL	48.2	46.8	45.7	48.7	49.0	44.7	48.1	44.5	45.6	38.1	38.5	39.0	37.4	35.4

Source: Exh E2-1-1 Table 1 (EB-2010-0008, EB-2013-0321, EB-2016-0152), Undertaking J12.7

The production forecast methodology is based on maximum production less adjustments for planned outages, estimates of forced production loss as measured by the forced loss rate (FLR), and adjustments for other losses. In the EB-2013-0321 proceeding, OPG filed two impact statements that reduced the applied for production forecast. There was a change in OPG's approach to include increased scrutiny to be responsive to OPG senior management direction to address a gap in production forecasting. The EB-2013-0321 decision found that the 0.5 TWh adjustment per year for major unforeseen events was not required given the higher degree of scrutiny. The 2017 to 2021 production forecast in Table 6 above does not include adjustments for major unforeseen events, however the methodology used to develop the 2017 to 2021 production forecast maintains the approach set out in EB-2013-0321. OPG stated in reply argument that it "is confident that its methodology produces a robust forecast of the production anticipated during the IR term for both Pickering and Darlington."

OPG states that the test period forecast is particularly challenging given the Darlington Refurbishment Program (DRP) and the Pickering Extended Operations (PEO) project. Other challenges include the Pickering vacuum building outage in 2021, and the program to replace primary heat transport (PHT) pump motors at Darlington. The following table summarizes historical production in the period 2008 to 2015. OPG did not meet OEB-approved production forecast (variance at line 5 of the table), or its own production forecast (variance at line 4 of the table).

Table 7: Production Forecast Variance

	TWh	2008	2009	2010	2011	2012	2013	2014	2015	Average
1	Application	51.4	49.9		48.9	50.0		48.5	46.1	
2	OEB Approved	51.4	49.9		50.4	51.5		49.0	46.6	
3	Actual	48.2	46.8	45.8	48.6	49.0	44.7	48.1	44.5	
4	Variance (3-1)	-3.2	-3.1		-0.3	-1.0		-0.4	-1.6	-1.6
5	Variance (3-2)	-3.2	-3.1		-1.8	-2.5		-0.9	-2.1	-2.3

Source: Exh E2-1-1 Chart 2

OEB staff submitted that the test period production forecast for Pickering was overstated based on 2008 to 2016 actual production, and the results of initiatives undertaken to improve Pickering reliability and FLR. OEB staff also analyzed planned outage days net of days for PEO and determined that there was a 30% increase in the test period compared to the prior five-year period – which included outages related to Pickering Continued Operations. OEB staff submitted that a 1.5 TWh increase in the period 2017 to 2019 was appropriate, while LPMA argued for a 2.3 TWh increase for the same period. OPG argued that these submissions are contrary to the evidence when outages related to PEO are factored into the forecast. OPG stated that the planned outage analysis of OEB staff and LPMA is incorrect and did not include the material impact of forced extensions to planned outages.

Following the failure of a PHT pump motor at Darlington in 2015, OPG expedited a five-year program to replace the motors (four per unit) as failure results in a forced outage. The PHT pump motor replacements are scheduled in eight 20-day mini-outages in the period 2016-2021. While OEB staff questioned the efficiency of the PHT pump motor replacements, no reduction in Darlington production was proposed. OAPPA submitted that there were opportunities to schedule the PHT pump motor replacements concurrently with other planned outages. OAPPA's proposal would increase the production forecast by 2.95 TWh in the test period. OPG replied that it cannot shift the outages by several years as these large, complex motors are not readily available. While OPG would prefer to replace the motors in a planned outage, OPG states that the proposed schedule is based on safety and reliability considerations, as well as practical matters such as availability of new motors.

Findings

The OEB approves the proposed nuclear production forecast of 188.3 TWh for the test period. OPG states that its production forecast methodology is well developed and rigorous. The OEB observes that the variance between forecast and actual production forecast has improved starting in 2011 and has stayed lower than the 2008-2009 variance. However, the OEB does not approve the proposed mid-term review of

production forecast. The OEB's mid-term review findings are set out in section 9 of this Decision.

While OEB staff and LPMA have proposed a higher production forecast for Pickering in the test period based on their analysis of historical and forecast Pickering production, the OEB approves OPG's proposal. The OEB accepts that the lower Pickering production forecast in the test period is largely related to the 7.5 TWh of production losses related to PEO,[10] and the planned 2021 vacuum building outage. The OEB notes that OPG's Pickering production forecast proposal is based on 5% FLR, which is challenging given the prior period FLR averaged 8.5%.[11]

The Pickering test period production forecast assumes that the PEO technical assessments will determine fitness for service beyond 2020, and that system planning and other regulatory considerations will be in place for operation in 2021. The OEB's findings on PEO are in section 5.7 of this Decision.

The OEB is not convinced that OAPPA's proposal, supported by LPMA, to replace Darlington PHT pump motors only during planned outages has fully considered all the risks. The consequences of pump motor failures are significant and result in an automatic reactor trip.[12] PHT pump motor failures resulted in production losses of 1 TWh in 2015 and 0.4 TWh in 2016.[13] The OEB approves OPG's proposal for Darlington production forecast and notes that the forecast is based on a 1% FLR for 2017 to 2019 versus 2.9% in the prior period. FLR will be higher as DRP progresses and refurbished units are returned to service beginning in 2020.

5.2 Nuclear Operations Capital and Rate Base

Background

The nuclear operations project portfolio includes OM&A projects and capital projects. The former are discussed in section 5.6 of this Decision. The historical and forecast nuclear operations capital expenditures, excluding DRP, are summarized in the following table:

[10] Reply Argument page 96.
[11] Exh E2-1-1 page 9.
[12] Reply Argument page 103.
[13] Tr Vol 13 pages 24-25.

Table 8: Nuclear Operations Capital Expenditures

$million	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Capital Project Portfolio	157.0	135.3	145.9	191.0	269.8	292.5	322.0	253.0	238.0	248.0	259.0	180.0
Pickering 2/3 Isolation	5.9											
Darlington New Fuel										15.3		
Minor Fixed Assets	15.4	12.9	15.5	10.2	22.9	22.3	31.0	26.0	20.0	19.1	19.5	19.3
Total	178.3	148.2	161.4	201.2	292.7	314.8	353.0	279.0	258.0	282.4	278.5	199.3
Five Year Average		2011-2015 Average: $223.7 million						2017-2021 Average: $259.4 million				

Source: Exh D2-1-2 Table 2, EB-2013-0321 and EB-2016-0152

The increase in capital expenditures starting in 2014 is largely related to DRP projects that were reclassified to the nuclear operations portfolio as these projects were determined to support the daily operations of the entire station. In total, $329 million of DRP projects were reclassified. The portfolio budget is administered by the Asset Investment Steering Committee (AISC). OPG states that the AISC review and Business Case Summary approval processes enhance OPG's ability to complete projects within budget and on schedule.

The historical and forecast nuclear operations in-service additions are summarized in the following table:[14]

Table 9: Nuclear Operations In-service Additions

$million	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Forecast	191.5	175.5	187.6	180.7	158.3	141.7	497.0	389.0	315.2	239.3	300.4	215.6
Actual	249.0	103.2	131.9	212.6	148.6	204.1	292.0					
Variance	57.5	-72.3	-55.7	31.9	-9.7	62.4	-205.0					
Updated - J21.1							292.0	479.0	354.7	385.4	244.7	181.6
Five Year Average		2011-2015 Actual Average: $160.1 million						2017-2021 (Updated) Average: $329.1 million				

Source: Exh D2-1-3 Table 4, EB-2013-0321 and EB-2016-0152, Undertaking J21.1

The historical and proposed nuclear rate base are summarized in the following table. The proposed rate base has been revised by the second impact statement, Exh N2-1-1, which excluded the in-service amount related to the DRP Heavy Water Storage and Drum Handling Facility Project (D2O project). DRP in-service additions are discussed in section 5.3. Asset retirement costs are discussed in section 5.13:

[14] There are support services capital projects entering rate base as well. For the test period, these additions range from $5 million to $18 million per year. The in-service additions with respect to DRP are discussed in section 5.3.

Table 10: Nuclear Rate Base

$million	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Net Plant (Excl DRP)	1,586.7	1,575.5	1,495.9	1,473.4	1,457.5	1,414.8	1,597.8	1,780.5	1,861.0	1,848.6	1,813.9	1,848.4
Net Plant (DRP)				60.2	121.2	192.6	419.1	611.9	601.5	586.7	4,699.1	5,154.5
Asset Retirement Cost	1,517.6	1,490.0	1,851.1	1,470.2	1,389.4	1,308.7	825.7	524.0	446.7	369.5	292.2	249.6
Total Nuclear Net Plant	3,104.3	3,065.5	3,347.0	3,003.8	2,968.1	2,916.1	2,842.6	2,916.4	2,909.2	2,804.8	6,805.2	7,252.5
Cash Working Capital	14.3	25.9	32.0	32.0	9.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Fuel Inventory	335.0	345.4	340.7	330.6	316.1	301.4	280.3	251.9	242.2	224.2	210.7	208.6
Materials and Supplies	441.8	421.9	413.3	413.5	420.8	426.7	438.7	448.7	444.5	436.3	427.0	415.0
Total Rate Base	3,895.4	3,858.7	4,133.0	3,779.9	3,714.3	3,655.2	3,572.6	3,628.0	3,606.9	3,476.3	7,453.9	7,887.1

Source: Exh B1-1-1 Table 2, Exh B3-1-1 Table 1 (EB-2013-0321 and EB-2016-0152), J21.1

Submissions of the Parties

Some intervenors questioned the pattern of nuclear operations capital spending and the proposed significant capital program in the test period. AMPCO observed that 2017-2021 capital expenditures are 20% higher than the period 2010-2015, and further observed that in-service additions as a percentage of capital expenditures was increasing. In reply, OPG provided reasons for the increasing capital expenditures, including the reclassification of DRP projects. The pattern of in-service additions as a percentage of capital expenditures is not smooth and reflects the multiple year duration of nuclear projects.

OEB staff and several intervenors submitted that the test period in-service additions should be adjusted to reflect the actual 2016 capital additions and historical overstatement of in-service additions, which totaled $(190.9) million in the period 2010 to 2016. OEB staff submitted that the in-service amounts should be reduced by $27.3 million in each year of the test period. OPG argued that the submissions of most of the parties ignored the $70.3 million of 2016 in-service capital that was placed into service in early 2017. Considering the combined effect of in-service additions and depreciation, OPG argued that updating for 2016 actuals and using its updated forecast of 2017-2021 in-service additions[15] results in a $60 million increase in revenue requirement because the project mix includes more Pickering projects which have higher depreciation rates. In OPG's view, the parties' argument regarding the historical overstatement hinges on the large 2016 variance (i.e. a single data point).

The Projects and Modifications (P&M) organization is responsible for nuclear operations capital projects. The effectiveness of P&M was reviewed in interrogatories, cross-examination and submissions. SEC analyzed nuclear capital projects that have gone into service between 2014 and 2016 and argued that the projects are 11.7% above the cost set out in the first execution business case, and that for projects larger than $20

[15] Undertaking J21.1.

million, the variance is 41.8%. Analysis of actual completion vs. scheduled completion for projects larger than $5 million, indicated average delays of 17 months.

OEB staff and several intervenors submitted that P&M performance has been weak and that this performance has been documented in reports prepared by Burns and McDonnell and Modus Strategic Solutions (Modus) for the Nuclear Oversight Committee of OPG's Board of Directors. Several parties referred to the 2nd Quarter 2014 Report wherein Modus cited P&M management failure for campus plan projects (projects related to DRP that also support ongoing operation of Darlington). The 2nd Quarter 2014 Report noted that P&M management failures were most evident with respect to the D2O Project[16] and the Auxiliary Heating System (AHS) project. AMPCO argued that OPG should undertake an audit of its P&M project controls in time for the mid-term review and provide a status report at that time.

The parties submitted that there should be rate base disallowances based on poorly developed estimates, flawed contractor selection and weak day to day risk management. The parties proposed reductions to in-service amounts ranging from $14.4 million to $53.1 million for the AHS project and reductions ranging from $7 million to $14.9 million for the Operations Support Building project. OPG argued that its application should stand, noting that increases are related to flawed initial estimates and that the final costs are the true costs of these projects.

Findings

Capital and Rate Base

This application is a five-year Custom IR. Accordingly, the opening rate base for 2017 should be based on the best information available. Undertaking J14.1 confirms that the 2016 nuclear operations in-service additions were significantly lower, i.e. $205 million lower, than planned. Undertaking J14.1 also notes that $70.3 million of the nuclear operations in-service additions originally planned for 2016 had been placed in-service by the first quarter of 2017. OPG has provided a revision to in-service amounts and rate base in Undertaking J21.1. That revision reflects the update for actual 2016 in-service amounts and changes in timing of in-service amounts in the test period underpinned by the 2017-2019 Business Plan. Some of the intervenors have submitted that the 2016 in-service additions should be revised, but that the test period in-service additions should

[16] In Exh N2-1-1 filed on February 22, 2017, OPG updated its application to remove the in-service amounts related to the D2O project due to project uncertainty. The revenue requirement impact will be recorded in the Capacity Refurbishment Variance Account once the project is in service.

remain as originally filed. The OEB finds that the Undertaking J21.1 forecast represents the appropriate starting point for the OEB's consideration. The forecast is updated to reflect OPG's best available information for the entire period from 2016 to 2021. The proposal of the intervenors to update only 2016 would not account for the cascading effects of additions in the test period. The OEB's finding on this matter applies to nuclear operations capital and support services capital.

The scope of capital expenditure on nuclear operations has expanded to include reclassified projects from DRP, replacement of obsolete equipment and additional Canadian Nuclear Safety Commission regulatory requirements, for example, related to Fukushima. As shown in Table 8, capital expenditures have increased in the bridge and test period. SEC submitted that the planned level of nuclear operations capital spending is much higher than historical levels. However OPG argued that the average 2017-2021 capital expenditures ($259.4 million) are in line with the historical period average 2013-2015 capital expenditures ($269.6 million).[17] The OEB observes, however, that a review of a five-year historical period average from 2011-2015 ($223.7 million) supports the SEC submission.

Based on the variance between 2010 to 2016 forecast and actual in-service additions, OEB staff submitted that in-service additions should be reduced by $27.3 million for each year of the test period (the total seven-year variance offset by the 2017 additions previously forecast for 2016). SEC submitted that a 12.5% reduction (the total seven-year variance as a percentage of the total additions) was appropriate. AMPCO argued that in-service additions should be reduced by 15% annually based on the in-service variance and AMPCO's review of variances for projects of different sizes and schedule delays. AMPCO suggested that a lumpy pattern of in-service capital additions and positive and negative variances would not be unexpected. The OEB concurs with OPG that the 2010-2016 seven-year variance of $(190.9) million is largely driven by the 2016 variance of $(205.0) million.

The forecast and actual in-service additions for 2016 are significantly higher than the period 2010 to 2015 and the forecast for the test period, both as filed and as revised, is higher than historical. The five-year 2010-2015 average actual in-service additions is $160.1 million while the five-year 2017-2021 average revised in-service additions is $329.1 million. OPG was not able to achieve the forecast 2016 nuclear operations in-service additions, and it is uncertain whether OPG will have the resources to execute a nuclear operations capital program with higher capital expenditures and a much higher level of in-service additions. The elevated capital expenditures and in-service additions

[17] Reply Argument page 33.

are concurrent with DRP which could further divert resources from the ambitious nuclear operations capital program, also contributing to delayed in-service additions.

The OEB finds that some reduction to the in-service capital additions is required. The OEB finds that the reductions proposed by SEC and AMPCO are too aggressive. Instead, the OEB finds that a 10% reduction each year (2017-2021) to the non-DRP nuclear operations and support services in-service capital additions is appropriate (using the updated forecast from Undertaking J21.1 as the starting point). The OEB notes that a similar reduction was ordered by the OEB in the last OEB decision on payment amounts with respect to OPG's hydroelectric in-service additions.[18]

The OEB's findings on nuclear Custom IR and productivity are in section 8.2. In accordance with those findings, the OEB orders OPG to apply a 0.6% stretch factor to the revenue requirement associated with the nuclear operations and support services in-service capital additions in each year from 2017 to 2021. The revenue requirement reductions related to the application of the stretch factor shall be applied in the typical manner whereby the reductions in each year persist going forward (during the entire 2017-2021 period). The OEB finds that the application of a stretch factor to the nuclear operations and support services in-service capital additions is appropriate. The OEB expects that OPG will achieve productivity improvements with respect to the delivery of its nuclear operations capital program during the 2017-2021 term and those productivity savings should be passed on to ratepayers.

Projects & Modifications Performance

The effectiveness of the P&M organization has been criticized by some intervenors. The evidence relied on by the intervenors included the 2nd Quarter 2014 Report to the Nuclear Oversight Committee of OPG's Board of Directors, prepared by Burns and McDonnell and Modus Strategic Solutions (Modus report), as well as OPG internal audit reports. SEC has completed an analysis of cost and schedule for historical projects and submitted that, "The Board can expect projects to continue to be over-budget and behind schedule. This means OPG will either overspend compared to its budget or, more likely, do fewer projects. Neither scenario is good for ratepayers."[19] OPG replied that the Operations Support Building project and the AHS project are the main contributors to the variances, and that OPG is close to budget otherwise. OPG stated that factors such as limited outage windows affect project scheduling.

[18] EB-2013-0321, Decision with Reasons, page 21.
[19] SEC Submission page 58.

AMPCO reviewed iterations of business case summaries and submitted that the number of superseding business cases indicated poor P&M performance. AMPCO also submitted that P&M has delayed implementing lessons learned and that project management practices such as the gated process were mentioned in the previous cost of service proceeding. Energy Probe questioned why it has taken OPG so long to overhaul its procedures for the P&M group. OPG maintains that it has been responsive to the Modus report and that subsequent reports have acknowledged OPG efforts to improve P&M.

As in all cases, it is the utility's responsibility to file an application that supports its proposals. It is not clear to the OEB that P&M project management processes and outcomes exhibit continuous improvement. There is a large volume of evidence – filed with the application, with interrogatory responses and in undertakings. There was extensive examination regarding estimates, classes of estimates, process controls, independent reviews and internal audits. OEB staff and the intervenors have argued that there are some P&M deficiencies. OPG argues that that the intervenors do not fully understand the reasons for schedule delays or the business case summary process,[20] and did not refer to the positive findings of internal OPG audit reports subsequent to the Modus report. The OEB finds that there is room for improvement in P&M performance and the findings on stretch factor implement this finding. The OEB also finds that disallowances related to two projects, the Operations Support Building (OSB) and the AHS, are appropriate, as discussed below.

AMPCO submitted that OPG should undertake an audit of its P&M project controls and file a status report at the mid-term review. OPG argued that this amounts to micromanaging. The OEB is not convinced that project controls are as robust as they could be. Robust project controls are a critical component of good planning and execution of capital projects that allow projects to be completed on time and on budget. Therefore, the OEB directs OPG to file an independent audit of its nuclear P&M organization including adherence to best practices, measures and reporting regarding cost and schedule performance, and implementation of lessons learned. The audit report will be filed with OPG's next cost-based application.

Auxiliary Heating System and Operations Support Building

OEB staff, AMPCO, CME, Energy Probe, LPMA, SEC and VECC have all proposed disallowances with respect to AHS and OSB rate base additions. These projects were classified as DRP projects in the previous EB-2013-0321 proceeding, but have since been reclassified. However, P&M managed the AHS and OSB projects when they were

[20] Reply Argument page 38.

considered DRP projects. The parties have suggested a range of disallowances referring to the range of estimates and forecasts filed in this proceeding[21] and the Modus report. The AHS project was specifically reviewed in the Modus report.

OPG submitted that the majority of the variances relate to initial estimation concerns and scope additions, and that the OEB should accept the OPG proposal as filed. Had the work been properly estimated and the full scope of work been known initially, OPG submitted that the original cost would be close to the current cost.

The estimates and forecasts for the AHS are:

- EB-2013-0321 as filed – $36.3 million (last EB-2013-0321 update $75.3 million)
- First execution business case – $45.6 million
- Forecast/proposed final cost – $107.1 million ($98.7 million in-service amount)

Clearly the original forecast has grown substantially from what was filed in the EB-2013-0321 proceeding.

The OEB does not accept OPG's position. The current cost is not the same as the prudently incurred cost. It is not obvious whether the best alternative was selected or whether costs for the alternative selected were contained. The Modus report states that, "P&M gave only token consideration to determining which contractor had a better approach for executing the work. P&M chose the 'low bidder' even though the other contractor's qualifications and project approach were viewed more favorably."[22] CME submitted that the evidence demonstrates that OPG's management of the AHS fell short of what ratepayers should expect: "OPG's argument that ratepayers are receiving value for the scope of work which was ultimately involved in completing the AHS project fails to take into account the lost opportunity to pursue alternative and less costly options for achieving the same outcome."[23] In response to cross-examination by SEC, OPG agreed that poor baseline information can lead to cost increases and schedule delays.

The parties have proposed disallowances that range from 100% of the variance between the first execution business case and the proposed in-service addition to 50% of the variance. The OEB has considered the submissions of the parties as well as the

[21] JT2.16.
[22] Exh L-4.3-Staff-72 Attachment 4.
[23] CME Submission page 25.

Supplemental Report prepared by Modus.[24] That report comments on the D2O and AHS projects, and states that the causes of cost overruns "root from mistakes made by management." The report also states that "many of the cost variances appear to be scope based, i.e. OPG is getting more value albeit for a higher cost." On the basis of these two considerations, mismanagement and increased scope, the OEB disallows 50% of the variance between the first execution business case and the proposed in-service addition on a permanent basis. The OEB estimates the reduction resulting from its finding to equal about $27 million. However, in the draft payment order, OPG should provide the detailed calculation showing the OEB ordered reduction related to the AHS based on 50% of the variance between the in-service amount set out in the first execution business case and the current proposed in-service amount.

The OEB is prepared to accept that there may be some merit to OPG's argument that there was an increase in scope. However, the OEB is not prepared to accept that the entire increase in cost is due to an increase in scope. The evidence shows that there were other options available to OPG when selecting a contractor that may not have been adequately explored. In addition, the Modus report speaks to issues with management of the project. The OEB cannot determine on an exact basis how much of the increased cost is due to additional scope and how much is due to project management issues. Therefore the OEB has considered both factors and has determined it will allow 50% of the increased cost on account of increased scope and disallow 50% of the increased cost to account for poor management.

The estimates and forecasts for the OSB are:

- EB-2013-0321 as filed – $29.7 million (last EB-2013-0321 update $45.1 million)
- First execution business case – $47.8 million
- Forecast/proposed final cost – $62.7 million ($60.6 million in-service amount)

Clearly the original forecast has grown substantially from what was filed in the EB-2013-0321 proceeding.

The submissions of OEB staff and the intervenors on the OSB are similar to their submissions on the AHS. The OEB finds that final costs for a building refurbishment that are double those initially filed in EB-2013-0321 are not reasonable. A senior OPG executive made a notation that "This is poor performance" on the Project Over-Variance Approval form seeking an increase from $53 million to $62 million for the

[24] Undertaking J15.3 Attachment 1 page 3.

OSB.[25] The notation on the Variance Approval form does not speak to the entire increase in cost of the OSB, but it does indicate that there was a performance issue on this project as well. Because the OEB cannot determine the exact amount of increased cost due to performance issues, the OEB has exercised its judgment and disallows 50% of the variance between the first execution business case and the proposed in-service addition on a permanent basis. The OEB calculates the reduction resulting from its finding to equal about $6 million. However, in the draft payment order, OPG should provide a detailed calculation showing the OEB-ordered reduction related to the OSB based on 50% of the variance between the in-service amount set out in the first execution business case and the current proposed in-service amount.

The methodology proposed by OPG to calculate rate base is accepted. However, the OEB's findings with respect to nuclear operations capital will impact the rate base amount. The OEB's findings for establishing the nuclear operations and support services rate base and capital additions shall be implemented as follows. The starting point for the rate base amounts and in-service capital additions for the 2017-2021 period is the updated forecast provided by OPG in Undertaking J21.1. The permanent disallowances associated with the AHS and OSB should first be removed from the amounts set out in the updated forecast. The 10% reduction should then be applied to the in-service capital additions net of the permanent disallowances. Finally, the stretch factor should be applied to the revenue requirement associated with the reduced nuclear operations and support services in-service capital additions resulting from the OEB-ordered disallowances.

For future proceedings, the OEB directs OPG to file, at a minimum, the costs for each major capital project based on the first execution business case and the final proposed amount for which OPG is seeking approval. The information provided should be sufficiently detailed as to adequately highlight both the total cost and the related in-service amount.

Operation of CRVA and Nuclear Operations Capital Projects

The Capacity Refurbishment Variance Account (CRVA) was established pursuant to section 6(2)4 of O. Reg. 53/05 to record the variance between certain actual capital and non-capital costs incurred and those costs underpinning payment amounts. The costs eligible for the CRVA are related to projects that increase the output of, refurbish or add operating capacity to a regulated generating facility.

[25] Exh D2-1-3 Attachment 1 Tab 1.

OEB staff raised a double counting concern in its submission.[26] If OPG placed less nuclear operations capital in service than approved, and if OPG places more CRVA eligible capital in service than approved, OPG would notionally recover the revenue requirement twice. OEB staff proposed that any nuclear operations in-service addition "credits" offset any CRVA "debits". CCC explored this matter in cross-examination.[27] CCC compared OPG's hydroelectric proposal with respect to the operation of the CRVA with OPG's proposed status quo operation for the nuclear sub-account of the CRVA. While the nuclear revenue requirement is based on annual capital plans for five years instead of mechanistic updates, CCC submitted that the remedy proposed by OEB staff should be implemented.

OPG has proposed that the operation of the nuclear sub-account of the CRVA continue as it has operated since the account was established. OPG argued that OEB staff and CCC's comparisons are wrong as different regulatory frameworks have been applied for the hydroelectric and nuclear businesses.[28] The OEB does not agree with OEB staff's and CCC's proposal. The potential outcome of the proposal is that prudently incurred CRVA eligible costs will be disallowed for recovery. OPG is entitled to recover prudently incurred CRVA-eligible costs as per the regulation. The OEB finds that the operation of the nuclear sub-account of the CRVA will continue as proposed by OPG.

Nuclear Projects Subject to CRVA

Under issue 4.1, OPG requested that section 6(2)4 of O. Reg. 53/05, and the associated CRVA treatment, apply to: (a) the capital and non-capital costs of the DRP; (b) the capital and non-capital costs of the Darlington Spacer Retrieval Tooling project; (c) the non-capital costs for the PEO project (including the Fuel Channel Life Assurance project); (d) the non-capital Fuel Channel Life Extension project (including ongoing costs); and (e) the Fuel Channel Life Management project.[29]

OEB staff submitted that the DRP and the other nuclear projects discussed above, as set out at OPG's updated response to an OEB staff interrogatory, meet the requirements of section 6(2)4 of O. Reg. 53/05 and therefore CRVA treatment applies.

The OEB finds that the projects for which OPG requested section 6(2)4 of O. Reg. 53/05 apply are appropriate. The OEB notes that no parties disagreed with OPG's request.

[26] OEB staff submission page 62.
[27] Tr Vol 20 page 82.
[28] Reply Argument page 207.
[29] Exh L-4.1-Staff-24 pages 1-2.

Capitalization of Darlington Unit 2 New Fuel

OPG proposes to capitalize half of the cost of new fuel for Darlington Unit 2 in 2019 when the fuel is loaded into the reactor, to be depreciated after the unit is in service over the life of the station. AMPCO submitted that it is not OPG's past practice to capitalize new fuel and that OPG's evidence to support the capitalization is weak. OPG replied that AMPCO mischaracterized the interrogatory response regarding new fuel.[30] There is no past OPG practice as Darlington Unit 2 is the first instance of a full new fuel load since OPG's inception. However, the practice is consistent with USGAAP and was applied by the former Ontario Hydro. The OEB accepts the new fuel capitalization proposal as it is consistent with accounting guidance and past practice.

Projects for Future Review

Undertaking J7.3 is an internal OPG audit, "Project Controls Audit – Project & Modifications Group," March 9, 2016. The report reviewed 13 projects and identified deficiencies related to cost and schedule baseline information. OEB staff observed that the Darlington Class II Uninterruptable Power Supply Replacement and the Fukushima Phase 1 Beyond Design Day Event Project are not near completion. OEB staff submitted that the in-service amounts may include costs that were imprudently incurred and that the OEB should identify these two projects as requiring further review at the cost rebasing when these projects are complete. OPG argued that this advance identification is unwarranted and unnecessary as the OEB has the ability to assess any cost variances at rebasing. The OEB finds that processes in place are sufficient and that advance identification is not necessary.

Draft Payment Amounts Order

The OEB requires OPG to incorporate the OEB's findings on nuclear operations and support services rate base and in-service additions in the determination of revenue requirement. The filing will be consistent with the LPMA submission with respect to the filing of fixed asset continuity schedules and changes in depreciation, to which OPG agreed. OPG shall file detailed fixed asset continuity schedules for each year that reflect the changes ordered by the OEB as well as the details of changes in the depreciation expense as part of the draft payment amounts order.

[30] Exh L-6.3-Staff-111.

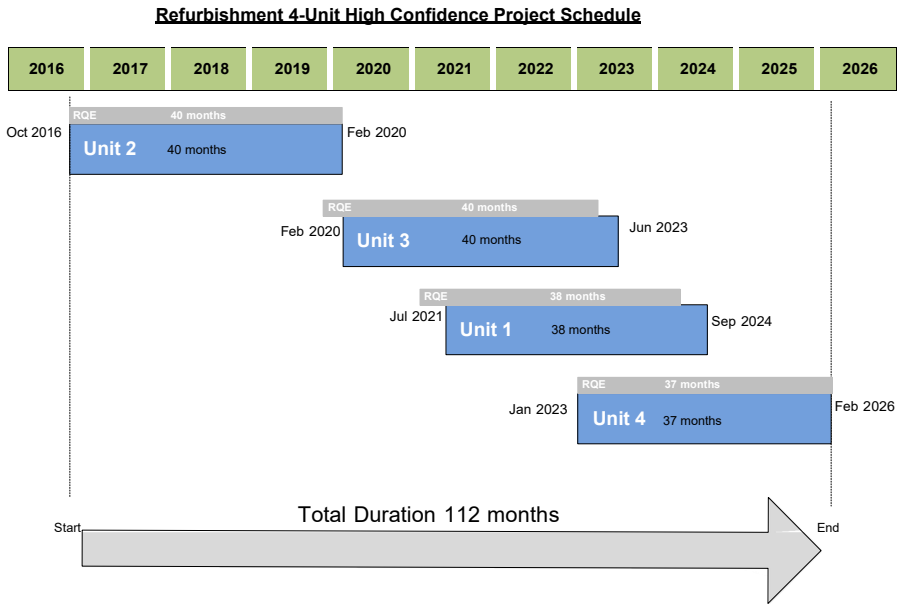
5.3 Darlington Refurbishment Program

5.3.1 DRP Planning and Costs

Background

The Darlington Refurbishment Program (DRP) is a $12.8 billion "megaprogram" to refurbish all four units at the Darlington nuclear station with a view to extending the life of the station until approximately 2055. OPG calls it a "destiny project" on which the company's future, and indeed the future of the Canadian nuclear industry, depend.

The first unit to be refurbished, Unit 2, was disconnected from the power grid (breaker open) in October 2016, and is forecast to come back online in February 2020. As the schedule below shows, the last of the units is expected to be completed in 2026.[31]



After ten years of planning, OPG's board of directors approved a Release Quality Estimate (RQE), setting out the detailed budget and schedule for the entire four-unit program, in November 2015. The RQE breaks down the $12.8 billion total cost as follows:

[31] Exh L-4.3-Staff-55 Attachment 1.

Table 11: Release Quality Estimate

Program Component	RQE Total Cost (Billion $)	RQE Total Cost (%)
Major Work Bundles	5.54	43
Safety Improvement Opportunities	0.20	2
Facilities & Infrastructure Projects	0.64	5
OPG Functional Support	2.23	17
Early Release Funds	0.11	1
Contingency	1.71	13
Interest & Escalation	2.37	19
Total Cost Estimate	**12.8**	**100**

The RQE is said to represent a "P90" confidence level. As OPG explains in its Argument in Chief, "A P90 estimate means there is a 90% chance that the actual project cost will not exceed the estimated amount." This confidence level was determined through statistical modeling of risks identified by OPG.

By the time of the hearing, about $2.9 billion of the $12.8 billion had already been spent.

In this application, OPG is seeking approval for rate base additions of $4.8 billion of in-service amounts associated with the Unit 2 refurbishment (including contingency, interest and escalation), along with $377 million in in-service amounts for other DRP-related facilities that will enter into service during the test period. No costs for the refurbishment of the other three units are requested in this proceeding, as they will not complete their refurbishments during the test period.

For the reasons that follow, the OEB approves the additions to rate base as proposed by OPG.

Regulatory Framework

The OEB's jurisdiction in respect of the DRP is limited by O. Reg. 53/05. The regulation states in paragraph 6(2)12 that "the Board shall accept the need for the Darlington Refurbishment Project in light of the Plan of the Ministry of Energy known as the 2013 Long-Term Energy Plan and the related policy of the Minister endorsing the need for nuclear refurbishment." The question of whether the DRP makes economic sense or is otherwise justified as a matter of electricity system planning was therefore out of scope in this proceeding.

The 2013 Long-Term Energy Plan, to which the regulation refers, states that "The government is committed to nuclear power," and that "Refurbished nuclear is the most cost-effective generation available to Ontario for meeting base load requirements." The Government of Ontario reiterated its support for the DRP in January 2016, after the RQE was finalized.

The regulation also stipulates in paragraph 6(2)4 that the OEB must allow OPG to recover DRP-related costs so long as they are prudent: "The Board shall ensure that Ontario Power Generation Inc. recovers capital and non-capital costs and firm financial commitments incurred in respect of the Darlington Refurbishment Project … including, but not limited to, assessment costs and pre-engineering costs and commitments… if the Board is satisfied that the costs were prudently incurred and that the financial commitments were prudently made."

This requirement is reflected in OPG's Capacity Refurbishment Variance Account (CRVA), which the OEB has approved in every payments amount case since it was given jurisdiction over payment amounts.[32] Under the CRVA, if OPG were to go over budget on the DRP, a balance would build up in the CRVA, and the OEB would review the prudence of the overruns before approving the disposition of the balance. The CRVA is symmetrical: if the program went under budget, the excess amounts collected through payment amounts would be returned to ratepayers in a future proceeding.

Matters related to the safety, security and environmental impacts of the Darlington station and the DRP are regulated by the Canadian Nuclear Safety Commission (CNSC). The CNSC reviewed OPG's environmental assessment of the DRP and determined in March 2013 that the program would not result in significant adverse environmental effects given the proposed mitigation measures. In December 2015, the CNSC renewed the operating licence for Darlington until November 30, 2025 and found that OPG is qualified to undertake the DRP.

Planning, Contracting and Oversight

Much of the evidence in this proceeding related to the extensive planning efforts that OPG has undertaken to prepare for the execution of the DRP. OPG explained that there are three phases to the DRP: Initiation, Definition and Execution. The exploratory Initiation Phase began in 2007 and was completed at the end of 2009 when OPG's board of directors agreed to proceed with the DRP. The Definition Phase culminated in the RQE, which was approved by the board of directors in November 2015, and endorsed by the Minister of Energy shortly thereafter. OPG explained that the Definition Phase included an extensive effort to define the scope of the program. The RQE incorporates a high-confidence (P90) budget and schedule.[33]

[32] In the first payment amounts decision, EB-2007-0905 (November 3, 2008), the OEB wrote: "In light of the obligation imposed on the Board by Section 6(2)4, the Board accepts that a variance account is required for the period beginning April 1, 2008 and authorizes OPG to establish the capacity refurbishment variance account."
[33] Tr Vol 1 page 32.

During the Definition Phase, OPG also sought to identify and incorporate "lessons learned" from other nuclear projects and other megaprojects. This included a thorough review of why prior refurbishments of CANDU nuclear power plants have experienced challenges, namely the refurbishments at Bruce Power, Point Lepreau (New Brunswick) and Wolsong (South Korea). OPG also built a full-scale reactor mock-up in order to test tools and train staff – something that had not been done for the earlier CANDU refurbishments. OPG awarded the major DRP contracts, and worked with the contractors to complete the detailed engineering for the program. In total, OPG spent $2.2 billion during the Definition Phase.

OPG is using a "multi-prime contractor model" where there is more than one prime contractor and OPG has a separate contract with each of them. As the owner and integrator between contractors, OPG has overall project management responsibility and design authority, with the assistance of external technical and project management experts. The benefits of this model are said to be that OPG retains control over the project, including deliverables, costs and schedules. OPG's functional support costs for DRP are forecast to be $2.2 billion.

OPG explained that it used different contracting strategies for each of the five major work bundles (retube and feeder replacement [RFR], turbine generator, steam generator, defueling and fuel handling, and balance of plant), which it says balanced the need and ability of OPG to transfer risk to its contractors against the benefit of achieving a lower price. By far the largest contract by value is the $3.4 billion contract for the RFR. The RFR contract is based on the Engineering, Procurement and Construction model and combines fixed pricing for known or highly definable tasks with target pricing for work that is less definable. If the actual cost of the work ends up being more or less than the estimate, the difference (outside a neutral band) would be shared by OPG and the contractor, through a system of incentives and penalties. The major DRP contracts were filed with OPG's application (with some redactions approved by the OEB for the versions placed on the public record).

OPG provided an assessment of its contracting strategies prepared by Concentric Energy Advisors (which was initially filed in the EB-2013-0321 case). Concentric concluded that the commercial strategies employed by OPG were appropriate and met the regulatory standard of prudence. In July 2016 Concentric provided an update report on the RFR contract and stated that the terms of the finalized contract, including the target price and the allocation of risk, are prudent.

OPG also filed an expert report by Dr. Patricia Galloway of Pegasus Global Holdings Inc., an expert in megaprojects, on the degree to which OPG's plan and approach to the execution of the DRP was consistent with the way other projects of comparable size and

complexity have been carried out. Dr. Galloway states in her report that, "Based on the review of OPG's governance, policies and procedures, and project controls developed and in use for the Program, and interviews conducted with OPG personnel, I found that OPG has reasonably and prudently prepared for its execution of the DRP."[34] Other key findings by Dr. Galloway include:

- "OPG sought to find the most qualified individuals in the industry to manage the Program and the individuals that were assigned to manage the Program are qualified and competent"[35]
- "OPG's oversight process is thorough, complete and consistent with what I would expect from a reasonable and prudent utility company embarking on this type of megaprogram"[36]
- "In reviewing OPG's policies and procedures, both from an organizational and program-specific standpoint, I found they are exemplary in their thoroughness and alignment with other individual policies and procedures providing OPG with a comprehensive tool from which it can properly execute the Program"[37]
- "I found the methodologies employed by OPG to develop the RQE estimate to be *world-class*"[38]

OEB staff also engaged an independent expert in megaproject planning and risk management: Kenneth M. Roberts, the chair of the construction law group at the US law firm, Schiff Hardin, LLP. Mr. Roberts agreed with Dr. Galloway that OPG's planning was thorough and in accordance with industry standards. Asked to summarize his conclusions at the oral hearing, Mr. Roberts answered:

> Specifically, my opinions included the following: That the DRP risk and OPG risk assessment are in fact consistent with industry standard practices used by utilities and large capital construction projects of similar size and complexity; that OPG's planned project control system for the DRP to manage costs and schedule are consistent with industry standard practices used by utilities in large capital construction projects of similar size and complexity; that OPG's program and project management staffing plans and the written management policies and procedures for the DRP are consistent with industry standards used by utilities in large capital projects; that OPG's contracting strategy, contract terms, and contractual risk allocation between OPG and the contractors for the DRP are consistent with industry standards for [risk] shifting on projects of this size and complexity.[39]

[34] Exh D2-2-11 Attachment 2, page 8.
[35] Exh D2-2-11 Attachment 2, page 40.
[36] Exh D2-2-11 Attachment 2, page 40.
[37] Exh D2-2-11 Attachment 2, page 43.
[38] Exh D2-2-11 Attachment 2, page 51 [emphasis in original].
[39] Tr Vol 7 pages 13-14. The transcript erroneously refers to "rate shifting" in the last sentence.

He cautioned, however, that no amount of planning can ensure the smooth execution of a megaproject: “All megaprojects experience some form of cost and/or schedule issues, which may include but [are] not limited to commercial challenges, changes, unexpected and high-impact events and/or delays. It's not a question of whether these types of events will occur. It’s a matter of how OPG handles and responds to these issues when they arise.”[40]

The DRP is now in the third and final phase: the Execution Phase. There are multiple layers of oversight, including but not limited to: a special DRP committee of the board of directors, which has engaged its own external expert; OPG’s internal audit group; and the Refurbishment Construction Review Board, which is made up of external individuals with expertise in megaprojects and nuclear power and which reports to OPG’s CEO and the Chief Nuclear Officer. OPG’s shareholder, the Province of Ontario, also has an oversight role, through the Ministry of Energy, which has retained outside experts through Infrastructure Ontario to provide oversight and report back on findings.

The President and CEO of OPG, Jeff Lyash, appeared before the OEB twice in this proceeding – first at the presentation day on September 1, 2016 and then on the first two days of the oral hearing on February 27 and 28, 2017 – to speak to the importance of the DRP to the company and the company’s efforts to ensure it is executed successfully. He explained:

> What incentive does OPG have to come in under budget? I think there is a layered set of incentives that we have, beginning with the fact that we're an Ontario business corporation, so, as part of that, we have an obligation, a fiduciary obligation, to run the company in a certain manner, and as part of that, our long-term objective is to satisfy our customers so that we're rewarded with net income and return on equity. Successfully completing this project on or under budget, on or under schedule, we believe substantially increases the company's potential to be successful in the long run.
>
> The second incentive I point out to you is that, in regard to Darlington, we’re a regulated generating company, and part of the compact for being a regulated generating company is to deliver value to the customer. And that’s at the heart of the value proposition for a regulated utility. It is for OPG. And so delivering projects ahead of schedule and under budget in a way that lowers the customer's price is part of our core objectives.
>
> The third element, I think, that provides us an incentive is that our shareholder in this case, unlike most other companies, are the citizens of Ontario. And so they, through the provincial government, own the company. And so, in defining what shareholder value we're delivering, ahead of schedule, under budget, and lowest customer price is what our

[40] Tr Vol 7 page 15.

> shareholder demands, and they exercise that through the Minister of Energy, and he has made that very clear.
>
> Another significant element here is that this is a destiny project for the company, and it is, frankly, a destiny project for the nuclear industry, and we're all very clear that meeting or exceeding expectations has tremendous value for the company and the industry in the long-term. This is also tied directly to management compensation, delivering not only the project but reliable and cost-effective operation of the units post-refurbishment.
>
> And then lastly – and I would ask Mr. Reiner to comment on this – we have built incentives down through the project management team and the contracts that we've structured.[41]

At the time the oral hearing began, at the end of February 2017, OPG advised that it was "tracking slightly under budget at this point in time, as of end of January, about $59 million".[42]

OEB staff submitted that OPG has planned effectively and that an appropriate framework has been implemented for DRP, but concurred with Mr. Roberts about execution phase risk. SEC's submission is similar:

> OPG appears to have tried their best to put in place project controls, a risk management framework, and a schedule that will ensure completion on time and on budget. All of this is a very positive sign. But it is only that. In no way does good planning guarantee successful execution.[43]

Proposed Additions to Rate Base

In this application, OPG asks the OEB to approve in-service additions to rate base for Unit 2 (the only unit planned to be completed in the test period) of $4,800.2 million in 2020 and 2021. In addition, OPG seeks approval for in-service additions of $377.2 million for other DRP-related projects, known as "campus plan projects", comprising the "early in-service projects", the facilities and infrastructure (F&I) projects, and the safety improvement opportunities (SIO) projects.[44]

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[41] Tr Vol 1 pages 37-38. March 2017 status reports were filed with Undertaking JT2.10
[42] Tr Vol 1page 16.
[43] SEC Submission page 42
[44] The early in-service projects are projects that will be placed in service before the refurbishment of Unit 2 is completed because they provide immediate benefit to the Darlington station even before Unit 2 is returned to service. The F&I projects are certain projects that OPG says are necessary to enable execution of the DRP, but which would be useful to the station even if the DRP were not completed. The SIO projects are initiatives that OPG committed to completed in the environmental assessment for the DRP that was approved by the CNSC, and would be useful to the station even if the DRP were not completed.

OPG is seeking approval of in-service additions to rate base associated with the DRP as set out in the following table:

Table 12
Bridge Year and Test Period In-Service Amounts ($ million)

	2016	2017	2018	2019	2020	2021	Total	Ex Campus Plan	Campus Plan
1 Original	350.4	374.4	8.9	0	4,809.2	0.4	5,543.3	4,800.2	743.1
2 Update		(365.9)		0			(365.9)		(365.9)
3 Net	350.4	8.5	8.9	0	4,809.2	0.4	5,177.4	4,800.2	377.2

Sources:

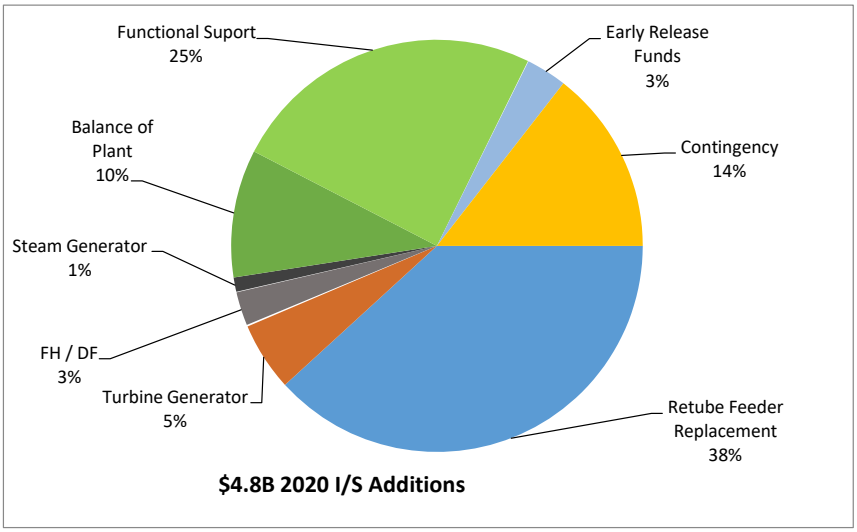
1. Original Request: Exh D2-2-1 page 6.
2. Update for removal of the Heavy Water Facility project (D2O project): Exh D2-2-10 Table 2 and Exh N2-1-1.
3. Net: Confirmed Tr Vol 1 pages 23 and 24 and Exh N2-1-1.

In an update to its original application,[45] OPG removed the Heavy Water Facility project (the D2O project), which will store large volumes of heavy water, but which has experienced delays and cost overruns. OPG testified that, despite these difficulties, the completion of the D2O project did not threaten the overall Unit 2 schedule and budget. Although some other DRP-related projects, including the Third Emergency Power Generator project, have also encountered delays or overruns, OPG did not seek to update the associated in-service amounts (and the timing of those amounts) as originally filed.

The Unit 2 in-service amounts are broken down as follows:[46]

[45] Exh N2-1-1.
[46] Exh D2-2-1 Figure 1.

Simplified Breakdown of Unit 2 In-Service Amounts[3]



Some parties proposed certain changes and reductions to OPG's requested in-service amounts. Several argued that the amount of contingency built into those amounts is too high. SEC argued that the updated Unit 2 Execution Estimate should be used as the basis for the OEB's approvals of the DRP-related in-service amounts.

In addition, there were objections to including the full $2.2 billion definition phase costs in the Unit 2 in-service amounts: (a) SEC argued that only half the definition phase planning costs, which exclude the other DRP-related facility costs, should be allocated to Unit 2; and (b) GEC argued that the definition phase costs cannot be determined as prudent at this stage as the costs would be too high in the event future units were cancelled.

Several parties commented on weak cost and schedule performance for F&IP and SIO projects, and submitted that the in-service additions related to the Third Emergency Power Generator project should be reduced; the proposed reductions ranged from $25 million to $40 million. On the basis of historical underspending, OEB staff submitted that project management and oversight costs for the test period should be reduced by 13%. OPG replied that the submissions are not supported by the evidence.

Some intervenors also claimed that the OEB is precluded by the terms of O. Reg. 53/05 from approving DRP costs on a forecast rather than a historical basis.

Contingency

The $12.8 billion DRP budget includes $1.7 billion of contingency. Of that amount, $694.1 million is attributed to Unit 2 and included in the $4.8 billion cost for that unit. This contingency is in addition to the contractor-level contingency built into some of the contracts.

OPG explained that it is understood by project management specialists that contingency funds are expected to be spent; they are not set aside as reserves to be drawn on only if the project goes off-course:

> [Contingency] refers to amounts that OPG anticipates spending because there are risk items and uncertainties that will occur and cannot entirely be mitigated or avoided. Contingency is included as a cost component of a project estimate just like any other component of a project. It is not an extra amount that will not be spent if the project goes as planned, nor is it a tool to compensate for an underdeveloped project plan. It is a necessary, legitimate and thoughtfully developed part of the estimated project cost based on residual (post-mitigation) risk and uncertainty.[47]

The higher the contingency, the higher the confidence level. In response to intervenor interrogatories, OPG provided the contingency amounts that would be associated with various confidence levels:

Table 13
Four Unit DRP Contingency Amounts

P level	Contingency	Reference
P99	$2.6 billion	L-4.3-15 SEC-027
P90	**$1.7 billion**	**D2-2-8 Attachment 1**
P70	$1.53 billion	L-4.3-12-OAPPA-008
P50	$1.4 billion	L-4.3-5-CCC-018, p.1

The DRP contingency amounts do not cover what OPG calls “low probability high consequence events”, such as “force majeure, a significant labour disruption, changes in the political environment, an international nuclear accident (Fukushima-type event) or incident, and unforeseen changes to financial and other economic factors beyond those assumed in the Program.”

[47] AIC page 53.

OPG described in some detail how it derived its contingency estimate for the DRP, using both qualitative and quantitative methods. This involved the development of a comprehensive risk register, which was vetted through "challenge sessions" of independent subject matter experts; the running of a "Monte Carlo simulation", which it described as "a computerized mathematical technique that replicates execution of the project thousands of times, accounting for potential realization of risk events and uncertainties"; consultation with outside experts (Palisade Corporation and KPMG); and review by OPG management.[48]

Both Dr. Galloway and Mr. Roberts testified that the level of contingency built into the DRP budget was appropriate.

Much of the cross-examination and submissions on the DRP focused on the amount of contingency built into OPG's cost forecasts. Some parties urged the OEB to approve in-service amounts for Unit 2 contingency based on a lower confidence level than P90.

AMPCO and CME supported the use of P90 for project planning and project approval. AMPCO submitted that this was the basis upon which the Ontario government has endorsed the DRP. However, OEB staff, AMPCO, CME and SEC submitted that contingency for project planning should differ from contingency for ratemaking. CME submitted that:

> … the use of a P90 estimate as the basis for rate recovery, in conjunction with Board approval of in-service rate base additions on a forecast basis is inappropriate, lacking in transparency, and creates a project spending relationship that is fundamentally contrary to the public interest.[49]

The Society and PWU fully supported the DRP as proposed by OPG and P90 contingency. The other parties proposed contingencies ranging from P37 to P50 and noted that any variances would be recorded in the CRVA. OPG argued that effective project planning leads to good ratemaking. The planning was undertaken not just to provide a conservative estimate to OPG's shareholder, but to ensure the success of DRP. OPG argued that P90 was developed probabilistically and was confirmed by Dr. Galloway and Mr. Roberts as best practice. Should the OEB approve a lower contingency, it should also approve the related earlier in-service date. In OPG's view, the CRVA is not a mechanism to defer revenue requirement.

[48] Exh D2-2-7 pages 2-5.
[49] CME submission pages 33-34.

Findings

The OEB is only providing findings with respect to the DRP-related capital for which there are in-service amounts proposed for the test period, or for which amounts previously went into service and have not yet been approved. DRP-related capital expenditures associated with assets that are expected to come into service after the test period will be subject to a future proceeding. The OEB will not make any findings on those costs as part of this decision. In making its decision with respect of the DRP, the OEB has considered the overall planning, project management and oversight for the DRP, as an understanding of those activities is necessary to determine the reasonableness of the DRP-related capital additions for which OPG seeks approval as part of this proceeding.

The OEB accepts that the proposed capital additions for the DRP are reasonable. The OEB approves in-service additions to rate base associated with the DRP of $5,177.4 million as described in Table 12. This reflects approval of $4,800.2 million related to Unit 2 and $377.2 million associated with the campus plan projects (including all of the proposed contingency amounts). The OEB also accepts OPG's proposed methodology for calculating the rate base associated with the DRP-related capital amounts that are approved by the OEB.

There is no doubt that this is one of the largest projects the OEB has ever considered, but the analysis which the OEB used is no different than the fundamental considerations the OEB normally uses when considering capital projects. With need established by O. Reg. 53/05, the focus shifted to planning, risk and execution.

The OEB finds that the planning undertaken by OPG for the DRP was reasonable. The OEB notes that both experts agreed that the planning for the DRP had been conducted according to industry standards. The OEB finds that OPG has developed reasonable project control systems to manage the cost and schedule of the DRP. OPG also performed adequate risk assessment for the project and put in place processes to address risks as they arise.

The OEB also finds that the oversight structure that OPG has designed to monitor the DRP appears appropriate. As previously discussed, there are multiple layers of oversight with respect to DRP that should allow OPG to react appropriately to potential issues. The oversight for the project includes both internal and external expertise and resources.

However, as in the last payment amounts case, the OEB makes no specific finding on whether OPG's DRP contracting strategy or the resulting contracts were reasonable. The OEB is of the view that to specifically comment on such matters as contractual off-

ramps, incentives for contractors and the management of risk as it relates to contractor performance would go beyond the OEB's scope in determining the DRP-related issues in this proceeding.

Overall, the OEB finds that OPG has implemented an appropriate structure based on its extensive planning efforts that provides it with the necessary capability to execute the DRP effectively. However, one of the challenges the OEB faces is that the nuclear industry is known for delivering projects over budget and beyond schedule. The OEB agrees with the parties and experts that strong planning does not assure successful execution.

The OEB notes that OPG considers the DRP a destiny project not just for the company but also for the nuclear industry at large. There is substantial pressure on OPG to complete the project successfully and deliver value to ratepayers. When asked about the incentives that OPG has to complete the project under budget, OPG responded that, as a regulated generation company, completing projects ahead of schedule and under budget is part of its core objectives. OPG also stated that its shareholders are the citizens of Ontario through the provincial government. Therefore, the shareholder demands that OPG deliver the DRP at the lowest possible customer cost. Management compensation is also directly tied to delivering the DRP successfully and providing reliable and cost-effective operation of Darlington post-refurbishment. Overall, the OEB finds that there are sufficient incentives, largely in terms of the long-term viability of the company, to execute the DRP successfully.

The OEB also notes, that as is discussed under Regulatory Framework, if Unit 2 is not completed on schedule and on budget, any costs in excess of the approved in-service amounts will be subject to a prudence review at the time the CRVA is brought forward for disposition. Therefore, if the project is completed over budget, the OEB will have the opportunity to review OPG's management of the execution phase of the project.

The OEB notes that OEB staff and intervenors made a number of arguments for specific changes and reductions to the in-service amounts requested by OPG as part of this proceeding. These arguments include: (a) the appropriate level of contingency; (b) the appropriate allocation of definition phase planning costs to Unit 2; (c) the appropriate in-service amounts related to the Third Emergency Power Generator; (d) the appropriate level of project management and oversight costs; (e) the use of the Unit 2 Execution Estimate as the basis for the OEB's approval; and (f) the constraints imposed by O. Reg. 53/05. The OEB does not agree with any of the arguments made by parties with respect to specific capital addition changes and reductions.

First, with respect to contingency, the OEB finds that the contingency budget proposed by OPG of $694.1 million related to the Unit 2 refurbishment is appropriate. The OEB notes that both experts agreed that a P90 confidence level was appropriate for a megaproject of this complexity.

In his testimony, Mr. Roberts asked why one would not want OPG to plan to a P90 factor. He stated that based on his expertise most projects do not have the luxury of getting to a P90, because they do not have the planning horizon (in this case 10 years) like OPG had. Mr. Roberts stressed that a P90 factor would provide more comfort that the project would come in on budget.

Some intervenors and OEB staff argued that basing rates on a P90 level was not appropriate. While planning to a P90 might be reasonable, rates should be determined based on a lower P-factor number, so that risk could be more fairly allocated as between OPG and ratepayers. Parties argued that for example, if rates were set based on a lower and less expensive P50 level, any costs beyond the P50 level would be subject to a prudence review. If the costs were lower than the P-level, then the amounts would be returned to ratepayers. Ratepayers would only pay actual costs. For its part, OEB staff suggested that the CRVA should be based on a P37 because that is what was used in OPG's own working schedule.

The OEB disagrees with these challenges to OPG's approach to contingency. The OEB accepts that P90 is a reasonable contingency factor for this project. The P90 factor was determined by OPG based on a statistical modelling of risks identified by OPG. As such, the P90 contingency amount should form part of the approved DRP-related in-service amounts. The OEB does not agree with the argument put forth by some parties that the contingency level should be set differently for planning and ratemaking purposes. The OEB finds that if setting a contingency budget at a P90 level is appropriate from a planning perspective it is logical that it is also appropriate to approve that level of contingency for recovery in rates.

The outcome of the argument that a lower contingency amount should be used for the purposes of ratemaking is that the CRVA could in the end, depending on the amount of contingency budget actually spent, be used as mechanism to defer the recovery of amounts reasonably spent by OPG. The OEB finds that the CRVA is not a mechanism by which to defer payment. To the extent deferral of payment impact is required; it should be done through the smoothing mechanism as prescribed.

On the issue of the appropriate allocation of the definition phase costs as between the multiple DRP units, the OEB finds that it is appropriate to include the definition phase costs in the in-service amounts as proposed by OPG. The OEB finds that the definition

phase costs related to certain projects that are common to the refurbishment of multiple units are properly included in rate base as proposed by OPG as they are used and useful at the time they enter service. With respect to the definition phase planning costs, the OEB agrees with OPG that these costs were incurred to permit Unit 2 refurbishment and therefore are properly included in rate base along with Unit 2 as proposed by OPG.

In regard to the argument made by some parties that the proposed in-service additions related to the Third Emergency Power Generator should be reduced, the OEB disagrees. The OEB agrees with OPG that the proposed disallowance suggested by parties is based only on the notion that there has been a variance from the initial project budget and the parties presented insufficient evidence to support the disallowance.

With respect to OEB staff's submission that the project management and oversight costs for the test period should be reduced by 13%, the OEB dismisses this argument. The OEB finds that OEB staff's argument does not consider the importance of the functions which the disallowance would impact.

The OEB is of the view that it is not necessary to use the Unit 2 Execution Estimate as the basis for its approvals. The OEB notes that the CRVA will operate to capture any revenue requirement impacts of changes to in-service dates and in-service amounts between OEB-approved and actual. Therefore, using the in-service amounts and dates as proposed by OPG is reasonable.

Finally, some intervenors argued that O. Reg. 53/05 requires the OEB to review the prudence of DRP costs after the costs have been incurred, rather than on a forecast basis. GEC submitted that the OEB should only approve DRP costs already incurred, while other parties submitted that the OEB could include forecast costs as a placeholder with a final determination on prudence to be made in another case.

Section 6(2)4 of the regulation states that the OEB "shall ensure" that OPG recovers its capital and non-capital costs and firm financial commitments incurred in respect of the DRP if the OEB "is satisfied that the costs were prudently incurred and that the financial commitments were prudently made". It is within that context that the OEB is asked to consider whether the proposed capital expenditures and/or financial commitments for the DRP are reasonable.

The OEB rejects the argument put forward by some parties that the regulation precludes the ability of the OEB to consider forecast costs for DRP in the revenue requirement and must instead engage in a retrospective review. Although intervenors are correct that section 6(2)4 speaks of costs that were prudently incurred (and financial commitments that were prudently made), the OEB does not accept the argument that the prudence of CRVA eligible costs must be determined after the costs are incurred.

This interpretation of the regulation is not consistent with the approach the OEB has taken in the past. When the OEB considers dispositions of the CRVA balances, it will review the variances from the forecast and actual amounts and will make a determination of prudence on the actual amounts over forecast. The OEB sees no reason to change its approach for the DRP. To do so would frustrate the purpose of the regulation.

Parties raised the argument that due to the way the CRVA was set up, OPG could undertake some spending that was not prudent, however so long as the total Unit 2 cost was less than $4.8 billion, the OEB would have no way to track and disallow that imprudent spending. The OEB recognizes that this risk exists, as it does with spending on any large project. The OEB finds that this risk is mitigated by the fact that in that event, underspending will have to occur in some other areas of the project to achieve the overall budget. OPG also does not deny that "imprudent costs could occur if the right actions are not taken."[50] It is for this reason that the OEB has carefully considered OPG's proposed budget for DRP and satisfied itself that the proposed $4.8 billion budget is appropriate.

For all of the above reasons, the OEB does not agree with the arguments made by parties for reductions to the in-service amounts. The OEB approves the in-service amounts for Unit 2 and the campus plan projects as proposed by OPG.

The OEB adds that OPG has planned a staggered approach – Unit 2 will be completed before the refurbishment of the next unit begins. The OEB expects that there will be unit over unit efficiencies. This expectation is consistent with OPG's position that it will benefit from "lessons learned" on each unit.

5.3.2 Treatment of DRP Costs in the CRVA

OPG OPG proposed that if actual additions to rate base are different from forecast amounts, the cost impact of the difference would be recorded in the CRVA, and any amounts greater than the forecast amounts added to rate base would be subject to a prudence review in a future proceeding. OPG's position is that the success of the Unit 2 refurbishment (including the campus plan projects) should be measured on a total envelope basis. That is, as long as Unit 2 is completed at or under the total $4.8 billion budget (and the campus plan projects are completed on budget), there would be no further prudence review of Unit 2 spending.

[50] OPG Reply Submission page 58.

Some parties suggested a more granular approach, where there would be a prudence review, on a component-by-component basis, of all variances recorded in the CRVA – even if the overall budget was met because overruns on one component were offset by savings on another. In this manner, the OEB would ensure that each component of the DRP is considered prudent on a standalone basis.

OEB staff also proposed that amounts earned in excess of the OEB-approved ROE during the test period be used to offset the revenue requirement associated with DRP-related cost overruns.

Findings

The OEB rejects the argument by OEB staff and some intervenors that a future assessment of amounts in excess of the forecast costs (through the CRVA) should be done on a component-by-component basis.

In its submission, OEB staff asks OPG to provide, as part of the draft payments order process, a detailed list of all the components of the Unit 2 refurbishment and a list of campus plan projects (over $5M) for which there are in-service amounts applied for as part of this proceeding. The OEB will not require OPG to provide component-by-component reporting. It is the OEB's expectation that OPG will deliver the DRP project on time and on budget. In doing so, the OEB will not make orders that would seek to constrain OPG's ability to execute the project as necessary. The RRF speaks to an outcomes based approach. The OEB will not micromanage the DRP, but rather will hold OPG accountable to deliver the DRP on time and on budget. If OPG were to face CRVA scrutiny for each component part of the Unit 2 project, it may lead to unintended consequences and lessen the ability of OPG to deal with issues as they arise. As OPG argues convincingly in its reply submission, the refurbishment of Unit 2 is a single integrated project, not a web of independent projects. It must be managed on a holistic, dynamic basis, where "higher cost may be incurred in one area to address a risk or resolve an issue in another area, which, when taken as a whole, is to the benefit of ratepayers."[51] At the end of the day, it is OPG's responsibility to deliver the Unit 2 project (and the campus plan projects) within the budget envelope approved in this proceeding (that is, the approved in-service amounts of $4,800.2 million for Unit 2 and $377.2 million for the campus plan projects). OPG should have some flexibility in doing so.

[51] Reply Argument page 60.

Still, to be clear, the OEB will closely scrutinize any exceedances above the approved in-service amounts in subsequent proceedings. OPG will not be made whole through the CRVA unless it can demonstrate that the exceedances were prudent. And the OEB will look carefully at any DRP-related assets that may be reclassified as non-DRP (that is, anything that is moved from the DRP umbrella to the general nuclear umbrella), just as it looked carefully in this proceeding at the AHS and OSB projects.

With regard to OEB staff's argument that amounts earned in excess of the OEB-approved ROE during the test period be used to offset the revenue requirement associated with DRP-related cost overruns, the OEB does not agree. OPG has included an off-ramp proposal to deal with the situation (which has never happened before) where OPG over-earns its allowed ROE.[52] The OEB is satisfied with this proposal.

5.3.3 DRP OM&A

OPG requested OEB approval of the following OM&A expenditures related to the DRP during the test period:

Table 14
DRP OM&A Expenditures

($ million)	2017	2018	2019	2020	2021	Total
DRP OM&A	41.5	13.8	3.5	48.4	19.7	126.9

These expenditures are mainly removal costs associated with the replacement of existing assets and the disposal of Low and Intermediate Level Waste variable expenses related to disposal costs (based on the volume of waste).

DRP-related OM&A spending, like capital spending, would be subject to CRVA treatment.

There were no submissions filed opposing the level of DRP OM&A expenditures.

[52] Under this proposal, an OEB review may be initiated where OPG's actual ROE is outside ±300 basis points of its allowed ROE. See section 8.1.7 of this Decision.

Findings

None of the parties objected to the levels of DRP OM&A listed in Table 14. The OEB accepts OPG's proposal in this regard.

5.3.4 DRP Reporting

OPG proposed to provide annual reports to the OEB on its DRP progress. OPG originally proposed that the scope of the annual reports would entail the following:

Table 15
Original Proposed DRP Annual Report

Category	Measure
Progress	• Key Achievements • % Complete
Safety	• All Injury Rate
Quality	• Quality Compliance (metrics to be determined)
Cost	• Cost Performance Index • Life-to-date cost • Forecast to Complete • Estimate at Complete
Schedule	• Schedule Performance Index • Status of Key Milestones • Critical Path Progress • Forecasted Completion Dates

As conceived by OPG, the annual reports would be for informational purposes, "not for purposes of project management or to determine the DRP's future."[53]

Some parties argued that more robust and more frequent reporting should be required, and pointed to the generic reporting template provided by Mr. Roberts as a good model.[54] OEB staff submitted that more detailed reporting would assist the OEB with its review of applications for disposition of CRVA balances. One party, Energy Probe, suggested that the OEB consider "a more aggressive form of reporting, which may entail an independent auditor that reports to the OEB on an annual basis."[55]

In its reply submission, OPG agreed to add some of the elements of the Roberts template to its proposed report, but maintained that other elements were unnecessary.[56]

[53] Reply Argument page 224.
[54] Undertaking J7.1.
[55] Energy Probe Submission page 18.
[56] Reply Argument pages 227-228.

OPG's revised reporting proposal is shown below, with the italics denoting those elements that were not included in its original proposal:

Table 16
Revised Proposed DRP Annual Report

Category	**Measure**
Introduction and Table Contents	N/A
Executive Summary	N/A
Overall DRP Status	• *High level overview of the DRP itself*
Progress	• Key Achievements • % Complete
Safety	• All Injury Rate • *Lost hours due to injuries* • *Explanation of any safety programs/initiatives launched by OPG/contractor*
Quality	• # of Significant Field Rework Events
Cost	• Cost Performance Index • Life-to-date cost • *Actual versus forecast cumulative capital costs* • Forecast to Complete • Estimate at Complete
Schedule	• *Current schedule performance* • Schedule Performance Index • Status of Key Milestones • Critical Path Progress • Forecasted Completion Dates
Engineering	• *Summary of engineering status and key issues*
Procurement	• *Summary of procurement status and key issues*
Construction	• *Summary of construction progress and analysis of any material variances from plan* • *Summary of any material labor issues* • *Summary of any material environmental issues*
Testing, Start-Up and Commissioning	• *Summary of systems tested, commissioned, restarted, and any material key results and issues*
Program Risks and Risk Management	• *Key risks and mitigation* • *Key issues and corrective actions*
Staffing	• *Actual staffing levels against plan* • *Changes to staffing plan* • *Efforts to fill open positions*

OPG reiterated in its reply that reporting on an annual basis would be sufficient to allow the OEB to track the progress of the DRP. Quarterly reporting, as proposed by some intervenors, would impose a "significant burden" on the program and on the company, and would make it more difficult to spot trends, since the incremental change from report to report would be minimal. OPG further argued that Energy Probe's proposal for an independent auditor reporting directly to the OEB was unnecessary in light of the extensive monitoring and oversight already built into the DRP.

Findings

The OEB accepts OPG's proposal in respect of DRP reporting, as revised in its reply submission. The level of detail as set out in Table 16 and frequency of reporting (annual) will provide the OEB with meaningful updates on the program's progress – and provide an early warning system if the program starts going off-plan – without being unduly onerous for OPG.

The OEB will not require an independent auditor as proposed by Energy Probe. The OEB heard evidence on the various layers of reporting and oversight that already exist, both internal (e.g. OPG's Internal Audit and Nuclear Oversight groups) and external (e.g. the Refurbishment Construction Review Board described previously and the independent advisor that reports to the Ministry of Energy). Adding another oversight body is not necessary.

5.4 Nuclear Benchmarking

Nuclear performance benchmarking has been an important function for both OPG and the OEB for many years. OPG's Memorandum of Agreement with its shareholder (Schedule C) includes a requirement for it to undertake benchmarking analysis, and the OEB has spoken of the importance of benchmarking in every payment amounts application. The OEB's Renewed Regulatory Framework also highlights the importance of benchmarking. OPG has stated that it is committed to "continuous improvement" in its benchmarking results.[57]

OPG's current approach to nuclear performance benchmarking was implemented in 2009 and has formed a key component of every payment amounts application since that time. OPG uses a top-down, gap-based nuclear planning process that was developed by ScottMadden Management Consultants (ScottMadden). Using

[57] Tr Vol 13 pages 3-4.

ScottMadden's methodology, OPG benchmarks itself annually against other North American nuclear operators on 20 measures. Of these 20, three have been identified as "key metrics": total generating cost (TGC), which is the "all-in" cost for generating electricity expressed on a $/MWh basis; the Nuclear Performance Index (NPI), which is a weighted composite of ten safety and performance indicators; and Unit Capability Factor (UCF), which measures a plant's actual output as a percentage of its potential output over a period of time.[58]

A summary of OPG's historical, current, and forecast benchmarking results is provided in Table 17, Summary of Nuclear Benchmarking Reports, below:

[58] Tr Vol. 13 pages 8-10.

Summary of Nuclear Benchmarking Reports

	---Rolling Actual Results---								--Annual--				
	a	b	c	d	e	f	g	h	i	j	k	l	m
	2008	2009	2010	2011	2012	2013	2014	2015	2016 Target Exh A2	2017 Target Exh A2	2016 Forecast Exh N1	2017 Target Exh N1	**2014** "Scott Madden" Phase 2 Report
Darlington													
WANO NPI (Index)	95.67	95.10	94.10	92.80	96.30	90.80	92.10	83.70	87.30	84.30	85.50	83.10	98.60
2-Year Unit Capability Factor (%)	91.99	90.20	89.40	89.60	92.00	90.44	89.41	83.96	91.10	85.10	90.00	85.10	93.30
3-Year Total Generating Costs ($/New MWh)	30.08	32.77	33.55	33.05	31.67	34.42	37.73	44.38	47.35	47.85	46.47	49.75	36.75
Pickering													
WANO NPI (Index)	60.90	67.17	64.30	66.10	64.70	67.50	64.30	68.50	72.30	71.10	75.60	69.70	77.83
2-Year Unit Capability Factor (%)	67.65	74.47	74.57	72.50	75.62	75.77	74.50	77.12	77.60	71.50	75.30	71.50	82.10
3-Year Total Generating Costs ($/New MWh)	67.05	66.42	65.62	65.86	67.16	67.38	67.93	67.36	71.09	76.48	72.46	78.83	66.84
Pickering A													
WANO NPI (Index)	60.84	61.10	47.70										70.90
2-Year Unit Capability Factor (%)	56.60	58.00	63.30										84.30
3-Year Total Generating Costs ($/New MWh)	92.27	95.41	90.21										70.41
Pickering B													
WANO NPI (Index)	60.93	70.20	72.60										81.30
2-Year Unit Capability Factor (%)	73.17	77.70	80.20										81.00
3-Year Total Generating Costs ($/New MWh)	58.68	54.64	54.79										64.80

Q1
Q2
Q3
Q4

Sources:
Column a - EB-2010-0008 Exh F5-1-1 page 12 (ScottMadden Phase 1)
Column b - EB-2010-0008 Undertaking J3.5 Attachment 1 page 4
Column c - EB-2013-0321 Exh L-6.4-SEC-92
Column d - EB-2013-0321 Exh F2-1-1 Attachment 1 page 3
Column e - EB-2013-0321 Exh L-6.4-SEC-92
Column f - EB-2016-0152 Exh L-6.2-SEC-63
Column g - EB-2016-0152 Exh F2-1-1 Attachment 1
Column h - EB-2016-0152 Exh L-6.2-SEC-63 Attchment 3
Column i and j - EB-2016-0152 Exh A2-2-1 Attachment 1 page 30 (2016-2018 Business Plan) - normalized
Column k and l - EB-2016-0152 Exh N1-1-1 Attachment 1 page 24 (2017-2019 Business Plan) - normalized
Column m - EB-2010-0008 Exh F5-1-2 page 16 (ScottMadden Phase 2)

As filed with Applications

OPG Nuclear	2008	2011	2014	2015
WANO NPI (Index)	17th out of 20	24th out of 27	22nd out of 24	23rd out of 24
2-Year Unit Capability Factor (%)	18th out of 20	25th out of 28	21st out of 24	23rd out of 24
3-Year Total Generating Costs ($/MWh)	16th out of 16	12th out of 14	10th out of 13	12th out of 13

Several parties argued that OPG's overall rankings on the three key metrics are poor (bottom quartile) and are not improving, and that OPG has not hit the targets that it set for itself. Parties noted that OPG's relatively poor performance, particularly in the TGC metric, meant that ratepayers were paying unreasonably high amounts for the electricity produced. OPG responded that its overall results were brought down by Pickering, which has smaller unit sizes and older technology than the comparators. It noted that Darlington has much stronger performance, and that the forecast "dip" in Darlington's performance in 2015 and 2016 is largely the result of the 2015 vacuum building outage, primary heat transport motor replacements and reduced production resulting from the DRP.

OPG produced what it referred to as "normalized" forecast results for Darlington. Although production from Darlington will be significantly reduced on account of the DRP, for the purposes of calculating its performance in the key metrics OPG assumed that production would in fact stay at historic levels. In OPG's view this produces results that are better reflective of its actual performance. OEB staff and several intervenors criticized this, noting that OPG did not consult with ScottMadden when it developed its approach to normalization.

Findings

Benchmarking assists the OEB with its review of applications. The Rate Handbook states that, "With the Custom IR rate setting options, a utility can customize the rate setting mechanism for their specific circumstance. Given this flexibility, the OEB will place greater reliance on benchmarking evidence for a Custom IR application to assess proposals over the five year term."[59] The OEB reviews the nuclear operations benchmarking in this section of the Decision. The review of the Goodnight staffing benchmarking, Willis Towers Watson compensation benchmarking and Hackett Group Corporate Support benchmarking are elsewhere in this Decision. The OEB finds that the filing for these independent benchmarking reports is informative and aligned with Custom IR.

OPG has been benchmarking the performance of its nuclear facilities against other North American nuclear operators for many years. While OPG prepares the nuclear operations benchmarking itself, it is done in accordance with the methodology first established by ScottMadden in 2009, and was reviewed by ScottMadden for this

[59] Handbook for Utility Rate Applications, page 18.

application.[60] The OEB finds that the methodology is appropriate with the exception of OPG's normalization proposal for the test period, as discussed in section 5.4.

OPG's nuclear operations benchmarking results have been a concern to the OEB since it began regulating OPG in 2008. In all three previous cost of service cases the OEB has noted OPG's poor performance relative to its peers, and has made disallowances at least partially on account of this.

The OEB recognizes that benchmarking is a tool that provides insight into relative cost and performance, but that it has limitations. No two businesses operate in identical environments, whether it be because of different technologies, different regulatory regimes, different jurisdictions, or any number of other potential differences. Benchmarking is therefore not the only factor that the OEB considers in setting payment amounts. Benchmarking does, however, offer a strong high-level picture of an enterprise's overall performance – this is why the OEB, OPG and the provincial government have all been strong supporters of benchmarking for many years. This is especially true when there are many years of benchmarking data prepared using the same methodology.

As part of its initial work with ScottMadden, in 2009 OPG set targets for itself for the three key metrics that both OPG and ScottMadden believed could be achieved by 2014. In preparing this application OPG also set targets for the years 2016-2019. All of the benchmarking results for the three key metrics since 2008 and the targets that were set for 2014 and 2016-2017 were summarized in a chart prepared by OEB staff, which is reproduced above.

Since OPG began benchmarking using the ScottMadden methodology, its overall results have been very poor. Since 2008 its ranking for each of the three key metrics has been either at or near the bottom in every year. Both the OEB and OPG expect better than this, and ratepayers should expect better too.

OPG argues that its poor results are driven to a large extent by the Pickering units. Pickering's performance is hampered by its small unit size, first generation CANDU technology, and low capability factor attributable to the extensive planned outage program that is required to extend its operating life. The Darlington units perform much better, generally achieving first or second quartile results over much of this period. There was a drop-off in performance in 2015 (where Darlington in fact had its worst results since ScottMadden benchmarking began), which OPG argues is on account of a vacuum building outage (VBO) and aging plant equipment, refurbishment support and

[60] Exh F2-1-1 Attachment 3.

regulatory requirements to extend the life of the facility. OPG argues that its two facilities should be considered separately, and not as a whole.

The OEB accepts that given the vintage of the Pickering station it is not realistic to expect top quartile performance. It also understands that Darlington's performance in 2015 was impacted to some extent by the VBO and possibly other challenges. The long term unit outages at Darlington that are scheduled during the test period also make benchmarking forecasting and target setting challenging.

In spite of this, OPG's benchmarking performance remains below the OEB's expectations. In terms of the benchmarking data, Pickering ranked 59 out of 64 nuclear plants in North America for the 2015 three-year TGC. Although this is impacted by the factors described above, it is not acceptable.

In 2009 OPG set targets for Pickering's performance (as well as Darlington's) that it expected to achieve by 2014. Both OPG and ScottMadden believed these targets to be attainable. OPG failed to achieve any of these targets. OPG had targeted second quartile performance and an overall rating of 77.83 for NPI (actual result: fourth quartile and 64.30), third quartile and a rating of 82.10 for UCF (actual result: fourth quartile and 74.50), and fourth quartile and a cost per MWh of $66.84 (actual result: fourth quartile and $67.93 per MWh). OPG's most recent targets for 2017 remain below what it initially expected to achieve by 2014. Despite the challenges of operating an older facility, OPG is responsible for Pickering's performance and should be expected to achieve at least its own performance targets. OPG set its targets with full knowledge of the facility and its condition. Despite that, OPG has continuously failed to meet its own targets. Having set the target, the OEB expects OPG to achieve it or very close to it.

Although Darlington certainly has much stronger performance, OPG also failed to achieve the 2014 targets it set for itself in 2009. OPG had targeted top quartile performance and an overall rating of 98.60 for NPI (actual result: second quartile and 92.10), top quartile and a rating of 93.30 for UCF (actual result: second quartile and 89.41), and top quartile and a cost per MWh of $36.75 for TGC (actual result: top quartile and $37.73/MWh. As noted above, OPG's Darlington performance for 2015 was in fact materially worse than its 2014 performance. The VBO accounts for part of this dip in performance; however as TGC is calculated on a three-year rolling average it cannot explain such a marked change on its own.

SEC has also pointed out that OPG rarely actually achieves the benchmarking targets that it sets for itself. SEC provided a table comparing the targets that had been set in OPG's business plans for the years 2013 through 2016, and the actual results that were

achieved. In more cases than not, OPG failed to hit its business plan targets.[61] In the period 2013 to 2015, OPG did not meet the NPI, UCF or TGC targets set for Pickering and Darlington, except for one instance – the NPI for Pickering in 2013. In 2016, OPG has met half the targets it set for the key measures.

Over the test period OPG's results for the key metrics are forecast to get worse. TGC is expected to increase steadily for both facilities through much of the test period. OPG's forecast results for Darlington during the test period are complicated by the DRP, which will see several units off-line for extended periods of time (either one or two units will be off-line in each year of the test period). OPG sought to "normalize" its Darlington TGC results by making adjustments to account for this lost production. It did this by inflating the denominator in the TGC equation (i.e. production in MWh) to the level it would have been at had the units under refurbishment not been out of service. The results presented in the business plan and N1 update, therefore, are not the actual TGC numbers that OPG expects to achieve; they have been "normalized" pursuant to OPG's methodology. Normalizing the data materially improves the results. Curiously, OPG did not consult with ScottMadden prior to making this adjustment, even though the original methodology had been created with ScottMadden. OPG did seek ScottMadden's opinion after the fact. ScottMadden's after the fact opinion offers, at best, very qualified support for OPG's normalization methodology, and suggests there would be preferable means of accounting for the impact of the DRP. The TGC figures are of course substantially higher (i.e. worse) if not normalized.

Regardless of whether OPG's approach to normalization is employed, the benchmarking results for both Pickering and Darlington (and therefore OPG's overall results as well) do not show continuous improvement. Indeed it is questionable if there is any overall improvement relative to OPG's peers at all, and in some areas OPG's performance appears to be getting worse. OPG must continue to work to improve its performance.

The OEB agrees with the submission of SEC that OPG should be required to report TGC on a normalized and non-normalized basis.[62]

The OEB's review of OPG's nuclear benchmarking performance is further reflected in the findings in the following sections of this Decision: Nuclear OM&A, Custom IR, Compensation and Pickering Extended Operations.

[61] SEC Submission pages 72-73.
[62] SEC Submission page 74.

The OEB expects OPG to file a review from ScottMadden regarding OPG's nuclear benchmarking methodologies with its next cost based application.

5.5 Nuclear Operating Costs

The following table summarizes the historical and test period nuclear operating costs:

Table 18: Nuclear Operating Costs

Line No.	Cost Item	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	OM&A:									
	Nuclear Operations OM&A									
1	**Base OM&A**	1,127.7	1,127.1	1,159.6	1,201.8	1,210.6	1,226.0	1,248.4	1,264.7	1,276.3
2	**Project OM&A**	105.7	101.9	115.2	98.2	113.7	109.1	100.1	100.2	86.8
3	**Outage OM&A**	277.5	221.3	313.7	321.2	394.6	393.8	415.3	394.4	308.5
4	**Subtotal Nuclear Operations OM&A**	1,510.8	1,450.3	1,588.5	1,621.3	1,718.9	1,728.9	1,763.8	1,759.4	1,671.6
5	**Darlington Refurbishment OM&A**	6.3	6.3	1.6	1.3	41.5	13.8	3.5	48.4	19.7
6	**Darlington New Nuclear OM&A**[1]	25.6	1.5	1.3	1.2	1.2	1.2	1.2	1.3	1.3
7	**Allocation of Corporate Costs**	428.4	416.2	418.8	442.3	448.9	437.2	442.7	445.0	454.1
8	**Allocation of Centrally Held and Other Costs**[2]	413.5	416.9	461.0	331.9	80.2	118.2	108.3	91.1	81.3
9	**Asset Service Fee**	22.7	23.3	32.9	28.4	27.9	27.9	28.3	22.9	20.7
10	**Subtotal Other OM&A**	896.5	864.1	915.5	805.0	599.7	598.3	584.1	608.6	577.1
11	**Total OM&A**	2,407.3	2,314.5	2,504.0	2,426.3	2,318.6	2,327.1	2,347.9	2,368.0	2,248.7
12	**Nuclear Fuel Costs**	244.7	254.8	244.3	264.8	219.9	222.0	233.1	228.2	212.7
	Other Operating Cost Items:									
13	**Depreciation and Amortization**	270.1	285.3	298.0	293.6	346.9	378.7	384.0	524.9	338.1
14	**Income Tax**	(76.4)	(61.5)	(31.8)	(18.7)	(18.4)	(18.4)	(18.4)	51.2	51.7
15	**Property Tax**	13.6	13.2	13.2	13.5	14.6	14.9	15.3	15.7	17.0
16	**Total Operating Costs**	2,859.3	2,806.2	3,027.8	2,979.4	2,881.6	2,924.4	2,961.9	3,187.9	2,868.2

Source: Exh F2-1-1 Table 1

Each element of nuclear operating cost is reviewed in the subsequent sections of this Decision except Asset Service Fee (line 9), which was fully settled by the parties. Similarly, there was partial settlement on nuclear fuel expense (line 12). The parties agreed to a 2% downward adjustment to the nuclear fuel bundle unit cost forecast in each year of the Custom IR term relative to the forecast in the Application. The impact of production forecast and fuel oil costs were unsettled. As the OEB has approved OPG's proposed production forecast and as there were no submissions on fuel oil costs, OPG shall reflect the adjustment to nuclear fuel bundle unit cost in the draft payment amounts order.

Elements of nuclear operating cost are also reviewed in section 8.2, Nuclear Custom IR. OPG's application proposed a stretch factor on base OM&A (line 1) and corporate allocated costs (line 7).

Overall Findings Regarding Nuclear Operating Costs

The OEB has determined that it will reduce the proposed test period nuclear operating expenses by a base amount of $100 million per year. The basis for this disallowance is described in further detail below, but the chief areas of concern are base OM&A, excessive compensation (including pensions), and excessive nuclear allocated corporate costs. The OEB's decision is also informed by OPG's nuclear benchmarking results. In addition, the OEB will not allow the costs related to the Fitness for Duty costs ($41 million over five years), although the OEB will allow OPG to track any costs for this program through a deferral account for review and disposition at a later date. The OEB will also be applying a stretch factor of 0.6% (as opposed to the 0.3% requested by OPG) to base, outage, project and allocated corporate OM&A. The reasons for these reductions are discussed below.

The OEB recognizes that there is some amount of overlap between some of the areas where it has identified excessive costs, in particular between compensation and allocated corporate costs. The OEB has taken this into account in reaching the $100 million figure. The evidence supports a range of disallowances under different categories which in theory could have supported disallowances that could total much greater than $100 million. In reaching a final number the OEB has sought to balance the interests of ratepayers in not paying an unreasonable amount, and OPG's needs to fund its nuclear operations.

5.6 Nuclear Operations OM&A

The historical and test period OM&A expenses for the operation and maintenance of the nuclear facilities is summarized in the following table. The expenses do not include the OM&A increases reflected in the Exh N1-1-1 Impact Statement, namely changes for forecast pension and other post-employment benefits (OPEB) cash amounts and an increase in base OM&A resulting from new Fitness for Duty requirements from the CNSC.

Table 19: Nuclear Operations OM&A

$million	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2016 Actual	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Base OM&A										
Labour (Regular and Non-Regular)	832.4	827.1	834.0	844.7	807.2	859.0	846.9	874.3	885.0	887.9
Overtime	48.6	46.7	54.5	47.8	63.7	46.4	46.5	46.1	47.4	47.8
Augmented Staff	3.1	3.6	4.4	3.3	6.7	4.5	3.5	3.0	2.6	1.6
Materials	85.1	73.4	83.4	70.5	81.7	68.4	68.2	68.5	71.1	70.8
Licence	34.2	32.6	34.5	36.4	36.0	37.2	38.7	39.6	40.2	40.6
Other Purchased Services	100.0	98.7	108.4	164.1	129.1	161.1	185.1	180.8	178.3	187.3
Other	24.3	44.9	40.3	35.0	58.0	34.2	37.0	36.2	40.2	40.3
Total Base OM&A	1,127.7	1,127.0	1,159.5	1,201.8	1,182.4	1,210.8	1,225.9	1,248.5	1,264.8	1,276.3
Project OM&A	105.7	101.9	115.2	98.2	89.3	113.7	109.1	100.1	100.2	86.6
Outage OM&A	277.5	221.3	313.7	321.2	306.7	394.6	393.8	415.3	394.4	308.5
Operations OM&A	1,510.9	1,450.2	1,588.4	1,621.2	1,578.4	1,719.1	1,728.8	1,763.9	1,759.4	1,671.4

Source: Exh F2-1-1 Table 1, Exh F2-2-1 Table 2, Undertakings J14.2 and J14.3

While 2016 actual operations OM&A was below budget, OPG states that its forecast for the test period is necessary to execute additional work and is relatively flat over the five-year period. The application states that base OM&A increases are related to labour and material cost escalation. OPG has proposed that the Custom IR stretch factor apply to base OM&A and allocated corporate OM&A (section 5.8 of this Decision).

Project OM&A expenses include both portfolio (managed by the Asset Investment Screening Committee) and non-portfolio projects. The two non-portfolio projects in the test period are the Fuel Channel Life Extension Project and Pickering Extended Operations. In the period 2017 to 2020, $57.6 million of project OM&A is forecast for PEO.[63]

The expenses related to planned outages are recorded under outage OM&A, and vary year over year depending on the number and scope of the planned outages. Darlington units are scheduled for outages every three years and Pickering units are scheduled for outages every two years. The application states that, "While there are many standard elements included in the outage scope, there can also be unique activities, programs or major equipment campaigns that are unit-specific."[64] The resources for outages are provided by a mix of regular, non-regular and augmented staff, as well as overtime and purchased services. The increase in outage OM&A forecast for 2017 is related to work on Darlington Unit 2 that is in addition to and separate from Unit 2 refurbishment work. OPG states that outage OM&A costs are stable until 2021, when costs drop because there are no planned outages for Darlington in 2021. In the period 2017 to 2020, $233.7 million of outage OM&A is forecast for PEO.

[63] Exh F2-2-3 page 6, Chart 2, Total proposed PEO project OM&A is $61.6 million; $4 million in 2016.
[64] Exh F2-4-1 page 6.

OEB staff and several intervenors proposed base OM&A and outage OM&A reductions generally based on historical under-spending. OEB staff submitted that fewer operating units during refurbishment and the use of swing staff from operations to DRP supported reductions in base OM&A. With respect to 2016 variances, the PWU submitted that the actual base OM&A labour expense was the lowest it has been historically and was an anomaly. None of the intervenors supported the $41 million expense related to the Fitness for Duty employee drug, alcohol, psychological and physical testing as the timing of the requirements is uncertain.

Findings

Nuclear OM&A is divided into a number of categories. The largest single subset of those costs is nuclear operations OM&A, which are the OM&A costs incurred for the normal operations of the nuclear stations. Nuclear operations is further divided into base, project, and outage OM&A. Over the course of the test period OPG has forecast these expenditures to be approximately $1.7 billion per year, which is around 60% of OPG's total forecasted nuclear OM&A.

Base OM&A is the single largest category of OM&A, averaging around $1.25 billion per year over the test period. Much of this expense relates to staff labour costs (including overtime).

A number of parties argued in favour of disallowances specifically to base OM&A (usually in addition to separate disallowances that were sought under compensation, which as noted has significant overlap with base OM&A). The arguments focused on excessive overtime costs, high purchased services costs, and questions as to why base OM&A costs were not going down in years when one or two Darlington units were to be out of service.

OPG responded that it had justified all of its proposed expenditures, and that in some cases parties were seeking a double disallowance (for example by seeking disallowances for the same thing under compensation and also under base OM&A).

The OEB will disallow $25 million per year on account of the forecast base OM&A expenses being higher than the actual spending that OPG is likely to incur.

The OEB agrees with OPG that base OM&A should be considered as a whole and not on the basis of its individual components. As OPG explained, various base OM&A components can be substituted for one another.[65]

In recent years, OPG has had difficulty spending its entire base OM&A budget for overtime, augmented staff, and other purchased services. These services are used as required to supplement Labour (Regular and Non-regular). OPG does not propose to reduce the amount spent on Labour in the base OM&A budget but at the same time does propose substantial increases to combined overtime, augmented staff and purchased services categories. OPG's evidence was that these three should be considered together as they all supplement Labour – which one is actually used depends on the particular situation.

In four of the last five years, OPG has underspent its budget for these categories. OPG has never spent a combined total of $200 million on these categories (the average actual spend was approximately $163 million from 2012-2016); however it is proposing to spend well over $200 million in each of the test years (as much as $235 million in 2018).[66] Given OPG's difficulties in spending to its budget in recent years, plus the very significant personnel demands that will result from other projects such as DRP (which are not part of base OM&A), the OEB does not believe that OPG's budgets for the test period are realistic. It will therefore disallow $25 million annually. The OEB finds that this reduction does not overlap with the separate findings on compensation as none of the payments for overtime, augmented staff or purchased services are relevant to the findings on compensation.

Outage OM&A is comprised of incremental labour, services and materials required to complete OPG's planned outages, along with inspection and maintenance services regular staff labour. Outage OM&A expenses are forecast to be in the $400 million range from 2017-2020, and then drop off to $308 million in 2021. $233 million of the total test period outage OM&A costs are for the PEO project.

Several parties argued for disallowances to outage OM&A, ranging from around $19 million per year to $54 million per year. The arguments focused on OPG's historic underspend on outage OM&A, and spending on some Darlington units that will be out of service on account of the DRP (the costs for which are accounted for separately).

OPG responded that ordinary outage work was still required during the DRP, and that it is in fact doing the work that ordinarily would have been done in two separate outages

[65] Reply Argument page 106.
[66] Reply Argument page 111.

on Unit 2 while it is out of service for refurbishment. OPG stated that the historic underspend was a result of material spending shifts, and explained that underspend typically occurs when outages are shifted from one year to the next, and that resource constraints can sometimes lead to changes in outage work scope.

The OEB accepts OPG's arguments and will approve the outage OM&A budgets as filed (subject to the OEB's other findings on items such as compensation and stretch factor). The OEB encourages OPG to continue to look for efficiencies in its outage related activities.

Project OM&A covers temporary, unique endeavours undertaken outside the routine base activities of the normal work program. OPG proposes to spend about $100 million per year on project OM&A.

With the exception of PEO, there were no specific concerns raised regarding project OM&A. The OEB approves the project OM&A test period expenditures as filed (subject to the OEB's other findings on items such as compensation and stretch factor).

Fitness for Duty Program

OPG proposed to spend $41 million on a new "Fitness for Duty" program over the course of the test period. Fitness for Duty is a random drug and alcohol testing program for employees in nuclear facilities that would be a licence requirement of the CNSC. Although the CNSC had not yet imposed this program before the close of record in this proceeding, OPG is generally aware of the details and has attempted to budget accordingly. It is not known for certain when the program will be implemented.

The OEB will not approve the $41 million expenditure for the test period. Although the OEB appreciates that OPG has to do its best to budget and plan for events that it does not have control over (such as requirements imposed by regulators), both the quantum and the timing of the costs are sufficiently uncertain that the OEB is not prepared to include them in payment amounts at this time.

All parties who made submissions on this point, including OPG, agreed that a deferral account should be established. The OEB will allow OPG to establish the Fitness for Duty Deferral Account to track the costs (if any) of implementing the Fitness for Duty program for review and disposition at a later date.

5.7 Pickering Extended Operations

Background

In 2010, the end of life for Pickering Units 1 and 4 (formerly Pickering A) was planned for 2021 and the end of life for Units 5 to 8 (formerly Pickering B) ranged from 2014 to 2016. OPG undertook the Pickering Continued Operations project (PCO) to extend the life of Pickering Units 5 to 8 to 2020. Increasing the 210,000 Effective Full Power Hours (EFPH) operational life of the Units 5 to 8 fuel channels was the major part of PCO. The work started in 2010 and was completed in 2015[67] at a cost of $192 million.[68] The OEB's approval for costs related to PCO spanned the two previous cost of service proceedings. The current fuel channel life is 247,000 EFPH and the current end of life for all Pickering units is December 31, 2020.[69]

OPG plans to extend the life of the units at Pickering again. OPG is proposing to extend the operation of Pickering beyond the current end of life of 2020 such that all six units operate until 2022, at which point two units would be shut down and the remaining four units would operate until 2024. The project to extend operation of Pickering beyond 2020 is referred to as the Pickering Extended Operations project (PEO). OPG estimates that an additional 62 TWh would be generated and the value to the Ontario electricity system ranges from $500 million to $600 million, while the IESO estimates that the net benefit is $300 million (study as updated in October/November 2015) to $500 million (original study March 2015).

Incremental Costs of PEO

A PEO Business Case Summary (November 2015) was filed in this proceeding. It provided estimates for the three categories of incremental costs related to PEO.[70] The work to enable PEO (Enabling Costs) including fuel channel work to determine fuel channel fitness for service beyond 2020, is proposed to be completed in the period 2016 to 2020. OPG also proposes costs for restoration of normal operations (Restoration Costs). These OM&A costs were previously expected to cease with a 2020 Pickering end of life. Normal operating costs for the period 2021 to 2024 ($4,220 million) would also be considered incremental; the table below only lists the normal operating

[67] Exh F2-3-1 page 3.
[68] Exh F2-1-1, EB-2013-0321 Decision page 49.
[69] While Pickering Units 1 and 4 can operate beyond 2020, operation of Pickering Units 1 and 4 is linked to operation of Pickering Units 5 to 8 due to inter-dependent systems at the Pickering site. The current end of life, December 31, 2020, for all Pickering units for depreciation and amortization purposes was approved by the OEB in EB-2015-0374.
[70] Exh F2-2-3 Attachment 2 page 6.

costs for 2021, the last year covered by this application. The following table summarizes the Enabling Costs,[71] Restoration Costs and incremental operating costs for which approval is being sought in this application. The costs shown in the table are a portion of the overall nuclear OM&A costs addressed in section 5.6 of this Decision.

Table 20: Incremental Costs of PEO

	($million)	2016	2017	2018	2019	2020	Total 2016-2020	2021
1	Enabling Cost							
2	Base OM&A	11.0	1.0				12.0	
3	Outage OM&A		22.1	37.3	88.7	85.5	233.6	
4	Project OM&A	4.0	2.5	18.0	18.4	18.7	61.6	
5	**Total Enabling**	**15.0**	**25.6**	**55.3**	**107.1**	**104.2**	**307.2**	
6	Restoration Cost							
7	Base OM&A		7.9	13.5	28.4	61.6	111.4	765.5
8	Outage OM&A					47.2	47.2	244.2
9	Project OM&A		4.5	0.1	2.8	14.6	22.0	46.5
10	Project Capital			15.5	17.6	13.1	46.2	23.1
11	Corporate Support		2.6	3.0	7.1	10.7	23.4	315.2
12	**Total Restoration**		**15.0**	**32.1**	**55.9**	**147.2**	**250.2**	**1,394.5**
13	**TOTAL**	**15.0**	**40.6**	**87.4**	**163.0**	**251.4**	**557.4**	**1,394.5**

Source: Exh L-6.5-Staff-118

Note: 2021 costs are incremental operating costs, including the vacuum building outage

Status of Approvals and Reviews

A January 11, 2016 news release from the Ministry of Energy states:

> The Province has also approved OPG's plan to pursue continued operation of the Pickering Generating Station beyond 2020 up to 2024, which would protect 4,500 jobs across the Durham region, avoid 8 million tonnes of greenhouse gas emissions, and save Ontario electricity consumers up to $600 million. OPG will engage with the Canadian Nuclear Safety Commission and the Ontario Energy Board to seek approvals required for the continued operation of Pickering Generating Station.

OPG's 2016-2018 and 2017-2019 business plans reflect PEO. Both plans have been approved by the Ministry of Energy.

The current Pickering power reactor licence was issued by the CNSC on September 1, 2013 and expires on August 31, 2018. In June 2014, the CNSC removed a regulatory

[71] $292 million of the $307 million Enabling Cost is forecast to be spent during the IR term: AIC page 88.

hold point prohibiting operation of Pickering beyond 210,000 EFPH. In its decision, the CNSC allowed OPG to continue operating Pickering up to 247,000 EFPH.[72]

At the request of the Ministry of Energy, the IESO prepared an assessment of PEO which was filed with the application. The IESO determined that the overall system economic value of PEO is positive as it reduces the need to operate or build more expensive gas-fired generation, increases export revenues and reduces carbon emissions. The IESO also concluded that PEO had other system planning benefits in addition to its economic value.

The OEB considered a motion by Environmental Defence that among other things sought an update to the IESO's cost-benefit analysis to reflect changes in circumstances such as the change in natural gas prices. For the reasons set out in the motion decision, the OEB decided that it would not require the IESO to update the cost-benefit analysis.[73] The motion decision, however, stated that the OEB was "open to considering arguments on appropriate cost containment measures to ensure efficient operation of Pickering."

Submissions of Parties

The Society and the PWU support PEO. Other parties submitted that the IESO analysis supporting PEO was weak and some of these parties submitted that the analysis should be updated before recovery of any PEO costs is approved. In support of their arguments, parties cited the changes since the cost-benefit analysis was completed including: lower cost of electricity imports, lower natural gas prices, introduction of the cap and trade program and lower load forecast. Environmental Defence also submitted that the cost to operate Pickering from 2021 to 2024 is $778 million higher than the costs OPG provided to the IESO. Furthermore, parties referred to Pickering's weak cost performance and reliability performance.

Both Environmental Defence and GEC argued that operating Pickering beyond 2018 was not cost effective, and completion of the Clarington Transformer Station in 2018 will address certain operating limitations in the eastern Greater Toronto Area. SEC does not support PEO or operation beyond 2020, but acknowledges that not approving PEO will lead to an increase in payment amounts due to severance costs and less time to amortize nuclear liabilities, among other things.

In light of the fact that PEO had not been approved on a final basis via the Long-Term Energy Plan (LTEP) and the fact that the CNSC licence expires in 2018, OEB staff

[72] Exh F2-2-3 page 3.
[73] Decision and Order on Motion Filed by Environmental Defence, EB-2016-0152, February 16, 2017.

proposed that the OEB approve the 2017 and 2018 Enabling Costs only, with any costs beyond 2019 added to the CRVA. (The LTEP was issued in October 2017, after the record in this proceeding had closed, and it endorsed the continued operation of Pickering to 2024, while noting that final government approval would still be required after the OEB and the CNSC reviewed the project.) LPMA proposed interim approval of the enabling costs. OEB staff also proposed that restoration costs be recorded in a new deferral account, to be disposed after the CNSC's licensing decision.

OPG argued that the IESO cost-benefit analysis was not outdated when filed and that it would not be appropriate to update only some variables when there are many inter-relationships among the various factors considered.[74] OPG noted that several parties proposed to defer or disallow costs but that these proposals did not align with proposals in other areas of the parties' submissions. OPG also submitted that there is a strong likelihood of approval by the CNSC given progress on technical assessments, and of approval of PEO in the 2017 LTEP.[75]

Findings

The OEB's findings in this section relate to the incremental costs of PEO as set out in Table 20 above. The Ministry of Energy has "approved OPG's plan to pursue continued operation of the Pickering Generating Station beyond 2020 up to 2024".[76] The OEB approves the test period enabling costs (Line 5 in Table 20) that will fund technical assessments to determine fitness for service of Pickering units beyond 2020, i.e. OPG's plan to pursue PEO.

While OPG's application is underpinned by PEO and operation of all Pickering units in 2021, the technical assessments are not yet complete and could indicate that some or all units at Pickering may not be fit for service beyond 2020. In addition, the Minister of Energy as the system planner may determine at a later date that some or all the units at Pickering will not be required beyond 2020. Generation planning, including the economics related to generation planning, is not within the scope of this payment amounts proceeding. Should the outcome of the technical assessments or system planning decisions significantly impact operation of Pickering in 2021, OPG shall return to the OEB to seek direction.

The proposed PEO restoration costs and 2021 operating costs are reviewed in section 5.6 – Nuclear OM&A. The OEB will disallow some of these nuclear OM&A costs on the

[74] Reply Argument page 134.
[75] Reply Argument page 137.
[76] Ministry of Energy News Release, January 11, 2016.

basis of a review of historical costs and Pickering's fourth quartile nuclear benchmarking performance. The OEB's finding on restoration costs and 2021 operating costs is not an endorsement of PEO. The reasons for the OEB's findings are discussed in the sections that follow.

Scope of Review

There is no shareholder directive to OPG regarding PEO, and unlike DRP, there is no specific reference to the need for PEO in O. Reg. 53/05. When the record closed in this proceeding, the LTEP in place was the 2013 LTEP, and it did not refer to operation of Pickering beyond 2020. On October 26, 2017, the 2017 LTEP was issued. It states:

> OPG is working on plans to continue to operate the Pickering Nuclear Generating Station until 2024. The continued operation of Pickering will ensure Ontario has a reliable source of emission-free baseload electricity to replace the power that will not be available during the Darlington and initial Bruce refurbishments. The continued operation of Pickering would also reduce the use of natural gas to generate electricity, saving up to $600 million for electricity consumers and reducing GHG emissions by at least eight million tonnes.
>
> The Province announced in January 2016 that it had approved OPG's plan to ask the OEB and the Canadian Nuclear Safety Commission (CNSC) to approve the continued operation of Pickering until 2024. The OEB will ensure that the costs of OPG's plan for continued Pickering operation are prudent, while the CNSC will ensure that Pickering operates safely during this period. OPG will still need to get final approval from the government to proceed with the continued operation of Pickering after these regulatory reviews are completed.[77]

In this proceeding, OPG has applied for, and the OEB is considering, a five-year test period from 2017 to 2021. Pending the results of the technical assessments of fitness for service, and the final system planning and government determinations, the OEB could be required to consider costs for the operation of Pickering beyond the current test period, which ends in 2021, in a future proceeding.

Section 78.1 of the Act empowers the OEB to set just and reasonable payment amounts for OPG's regulated generation facilities. The recent amendments to O. Reg. 53/05 require the OEB to determine revenue requirement for the nuclear facilities for each year on a five-year basis, and to smooth weighted average payment amounts beginning on January 1, 2017 and ending when DRP concludes. The proposed revenue requirement for the nuclear facilities includes the costs set out in Table 20.

In assessing OPG's proposed incremental costs for PEO during the 2017 to 2021 test period, the OEB has considered whether the costs are reasonable. Several parties have

[77] Ontario's Long-Term Energy Plan – 2017, Delivering Fairness and Choice, October 26, 2017.

submitted that the OEB's consideration of incremental costs for PEO should also consider the need for the operation of Pickering beyond 2020.[78] In its submission on the Environmental Defence motion, OEB staff stated:

> The onus rests with OPG to show that the costs it seeks to recover through OEB approved payment amounts are reasonable. The OEB's enquiry into the reasonableness of the proposed payment amounts could extend to asking whether a particular project is necessary at all. If the OEB determines that a proposed project provides poor value for ratepayers, then it should not approve the costs associated with that project.[79]

SEC filed the following submission on this matter:

> There are no legislative or regulatory constraints on the Board's role in determining the appropriateness of including, in payment amounts, the costs for extending Pickering. As is the case for all other investments, in making its determination whether costs are reasonable, the Board must determine if there is a need for the underlying asset or activity that warrants the expenditure.[80]

PWU did not agree, submitting that section 78.1(1) of the Act entitles OPG to receive payments from the IESO with respect to the output that is generated by prescribed facilities. The sole role of the OEB is to determine the amount of that payment.

As noted in OPG's reply argument, the OEB has stated in every previous cost based proceeding that its role with respect to Pickering is to set just and reasonable payment amounts.[81] Section 25.29 of the *Electricity Act, 1998* establishes that the Minister of Energy (with the approval of the Lieutenant Governor in Council) is responsible for system planning, and in that role many factors are considered and evaluated as noted in the LTEP excerpt regarding PEO above, including emissions, amount of baseload generation and replacement power. The IESO witness testified that determining the value of Pickering operation beyond 2020 is a complex matter requiring assessment of many factors that impact the provincial grid. Consistent with previous proceedings and the OEB's findings on the Environmental Defence motion,[82] the OEB finds that generation planning, including the economics related to generation planning, is not within the scope of this payment amounts proceeding.

[78] Some parties have questioned the need beyond 2018.
[79] OEB Staff Submission on Environmental Defence Motion, December 9, 2016.
[80] SEC Submission page 76
[81] Reply Argument page 131.
[82] Decision and Order on Motion Filed by Environmental Defence, February 16, 2017, page 5.

A significant amount of the examination relating to PEO was directed to the IESO's Assessment of Pickering Life Extension Options.[83] As noted above, the IESO's assessment was prepared in 2015 at the request of the Ministry of Energy. Several parties, Environmental Defence and GEC in particular, challenged whether the IESO's assessment was sufficiently robust and whether all considerations and sensitivities had been sufficiently assessed, e.g. decreasing provincial demand, lower natural gas prices, lower generation replacement costs. On the basis of these concerns and based on their analysis, Environmental Defence and GEC argued that it is uneconomical to operate Pickering beyond 2018. Environmental Defence submitted that the operation of Pickering from 2018 to 2020 is a net cost to ratepayers and that this net cost should be included in assessment of cost effectiveness of operation beyond 2020.

Some parties argued that the IESO assessment should be updated before the OEB approved PEO costs. OEB staff noted in cross-examination that the CNSC may issue a partial approval which extends the permitted EFPH by a lesser amount than OPG is requesting. The IESO witness agreed that further analysis of benefits would be required.[84] However, for the purposes of this proceeding, and as determined in the decision on Environmental Defence's motion, the OEB finds that an updated IESO assessment would be of limited value.

The OEB finds that the examination of the IESO's assessment in this proceeding was informative. The IESO witness testified that the next 10 to 15 years are a source of very significant change in Ontario's power system including the future prospects of generation contracts once they reach their commercial term.[85] The witness stated that:

> A lot of that is distilled into the early to mid and late 2020s, when we have the maximum refurbishments going on in our fleet. And for that reason, aside from the potential for economic benefit, aside from that potential which we acknowledge here can be plus or negative, right? We don't know. But aside from all that, we think that Pickering provides some important potential coverage during that period of transition.[86]

This testimony is consistent with the OEB's view stated above that a large number of factors need to be assessed before the system planner can issue a final approval on Pickering operation beyond 2020. While some of the factors were reviewed in this proceeding, many underlying system planning considerations were not.

[83] Exh F2-2-3 Attachment 1.
[84] Tr Vol 12 page 115-116.
[85] Tr Vol 8 pages 91-92.
[86] Tr Vol 8 page 92.

Pickering Operation in 2018

Environmental Defence and GEC submitted that there may be no need for Pickering beyond 2018 for economic reasons and the future completion of the Clarington Transformer Station. The submissions of Environmental Defence and GEC point to the 2013 LTEP which referred to a potential early shutdown of Pickering:

> The Pickering Generating Station is expected to be in service until 2020. An earlier shutdown of the Pickering units may be possible depending on projected demand going forward, the progress of the fleet refurbishment program, and the timely completion of the Clarington Transformer Station

The 2017 LTEP has since been released and it refers to an eventual retirement of Pickering:

> To meet the needs of the growing eastern GTA and prepare for the eventual retirement of Pickering Nuclear Generating Station, Hydro One is building the Clarington Transformer Station in the Municipality of Clarington. Hydro One expects to bring the station into service in 2018.

The OEB also notes that OPG's 2017-2019 business plan, including operation at Pickering, has been approved by the Minister of Energy.[87] The future of Pickering as it relates to the Clarington Transformer Station is a matter that will be considered by the system planner, not the OEB. However, should completion of the transformer station trigger a shutdown of Pickering in the test period, OPG shall return to the OEB to seek direction.

The current Pickering five-year power reactor licence expires on August 31, 2018. OEB staff submitted that the CNSC determination on the Pickering power reactor operating licence in 2018 was a risk. In the application OPG stated that it expects to request a 10-year licence renewal, which will take the Pickering units through both the end of commercial operations and the safe storage period. OPG anticipates that the CNSC decision addressing operation beyond 2020 will occur as part of the Pickering licence renewal.

[87] Reply Argument, Appendix A.

The current CNSC licence allows OPG to operate Pickering up to 247,000 EFPH. OPG's witnesses summarized their communications with the CNSC in cross-examination:

> We've already provided a high confidence statement and we've been working closely with the regulator over the last couple of years with respect to operating the units to 261,000 hours, so we've been working in increments, in terms of demonstrating that we can achieve this end of life, and if you look at where we are in terms of 261,000 hours, that would essentially take five units out to 2022 and a couple of them beyond 2022 already.[88]

Should a CNSC licensing matter materially affect Pickering operation in the test period, OPG will be expected to notify the OEB.

Enabling Costs

OPG has forecast PEO enabling costs of $307.2 million of which $292.2 million are test period costs (line 5 of Table 20). Some of the enabling costs must be incurred in 2017 and 2018 in order for OPG to be in a position to obtain the licence renewal it seeks from the CNSC in 2018. This includes costs for the Periodic Safety Review, Fuel Channel Life Extension project and other asset condition assessments. All the enabling costs are CRVA eligible.

In January 2016, the Ministry of Energy "approved OPG's plan to pursue continued operation of the Pickering Generating Station beyond 2020 up to 2024". In cross-examination, the IESO witness supported "the continued exploration of this Pickering extension concept".[89] No parties challenged the specific activities or the quantum of the enabling costs.

The OEB approves the test period enabling costs that will fund technical assessments to determine fitness for service of Pickering units beyond 2020.

Restoration Costs and Operating Costs

OPG has forecast PEO restoration costs of $250.2 million in the test period and incremental operating costs related to Pickering of $1,394.5 million in 2021 (line 12 of Table 20).

[88] Tr Vol 15 page 146.
[89] Tr Vol 8 page 87.

Regarding restoration costs, OPG's evidence is that the shutdown in 2020, as previously anticipated, would have caused the cost of ongoing operations to decline starting in 2017.[90] OPG states that the restoration costs proposed are necessary to restore ongoing operating and maintenance programs to normal levels for the 2017 to 2020 period to enable PEO to go forward. For example, OPG states that outage requirements that were set to decline will now need to be reinstated. As well, both OM&A and capital projects will need to be restored to the levels required to continue to operate safely and reliably for two to four additional years and to improve plant reliability during that time. Restoration costs include labour costs, "non-portfolio" projects to address life cycle aging of equipment and regulatory requirements resulting from PEO and costs of the two year planned outage schedule for routine inspection and maintenance.[91]

The submissions on these test period restoration costs and operating costs in 2021 range from zero (SEC and GEC) to approval of all costs (PWU and Society). The PWU submission states that the only potential basis to disallow any part of the proposed costs is Pickering's relative cost performance in benchmarking, although the PWU has reservations regarding the Pickering benchmarking results.

In considering whether the proposed Pickering restoration costs and operating costs in 2021 are reasonable, the OEB has reviewed historical costs and Pickering's performance against other nuclear operators. Some parties have argued that the OEB should consider cost effectiveness from a system planning perspective including comparison with other generation options. As noted above, the OEB finds that this is not within scope.

The OEB is making findings on the prudent costs of restoration in the test period and operation of Pickering in 2021, to allow for the operation of Pickering from 2017 to 2021 as is currently expected by the system planner.

The base, project and outage OM&A disallowances are reviewed in section 5.6 – Nuclear OM&A. Project capital is reviewed in section 5.2, and corporate support costs are reviewed in section 5.8.

Depreciation

Except in calculating depreciation (including the depreciation on asset retirement costs), OPG has prepared its application on the basis that PEO will go forward as currently planned. OPG is proposing that any adjustments to depreciation arising from the

[90] Exh F2-2-3 pages 6 and 7.
[91] Exh F2-3-1 page 2.

extension of life of the assets via PEO will be captured in a deferral account. No party objected to this approach. The OEB approves this approach, noting that it is consistent with the approach previously approved by the OEB.

Future Considerations

As explained below in section 9 of this Decision, the OEB has not approved the mid-term review for production forecast proposed by OPG. However, OPG shall return to the OEB to seek direction if the outcome of the technical assessments or system planning decisions significantly impact operation of Pickering in 2021 and if a CNSC licensing matter materially affects Pickering operation in the test period.

5.8 Corporate and Centrally Held Costs

5.8.1 Corporate Costs

OPG corporate business functions provide support to the nuclear business, the regulated hydroelectric business and the unregulated business. The corporate support costs have been allocated using the methodology that was accepted by the OEB in previous proceedings. The historical and test period corporate support costs allocated to the nuclear business are summarized in the following table:

Table 21: Nuclear Corporate Costs

	$million	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
1	Business and Admin Service												
2	IT NHSS	62.5	61.2	60.5	55.9	54.6	52.7	46.8	45.3	43.7	43.7	42.1	40.8
3	IT Support Cost	27.8	24.6	22.6	35.9	36.6	37.3	41.8	43.7	42.6	42.3	42.7	43.2
4	Total IT Costs	90.3	85.8	83.1	91.8	91.2	90.0	88.6	89.0	86.3	86.0	84.8	84.0
5	Supply Chain	3.4	2.6	48.4	48.6	42.5	41.1	47.6	47.3	46.7	47.8	49.2	50.3
6	Real Estate	31.7	31.7	96.2	88.4	83.3	82.5	89.9	94.5	92.8	95.0	95.5	98.7
7	OM&A Project Costs	6.8	8.1	9.5	17.9	10.2	17.4	18.9	15.3	13.3	12.2	12.8	13.1
8	Total Business and Admin Service	132.2	128.2	237.2	246.7	227.2	231.0	245.0	246.1	239.1	241.0	242.3	246.1
9	Finance	33.3	38.0	46.2	46.3	44.4	35.6	40.2	41.5	39.4	39.0	38.8	39.9
10	People and Culture	33.9	38.0	90.0	91.6	98.2	95.8	92.4	96.2	95.3	97.8	98.5	100.5
11	Commercial Ops and Environment	16.7	16.4	12.7	14.7	19.5	16.8	20.4	20.2	18.9	19.9	19.6	21.8
12	Corporate Centre	10.4	12.5	22.3	29.2	26.9	39.6	44.3	44.9	44.5	45.0	45.8	45.8
13	**TOTAL (lines 8-12)**	**226.5**	**233.1**	**408.4**	**428.5**	**416.2**	**418.8**	**442.3**	**448.9**	**437.2**	**442.7**	**445.0**	**454.1**
14	2016 Actual							426.2					

Source: Exh F3-1-1 Table 3 and 7 (EB-2013-0321),Exh F3-1-1 Table 3 and 7, Undertaking J14.2

OPG's Business Transformation initiative restructured the company around a centre led model. A large number of staff from operations and project groups were transferred in 2012 to support groups such as procurement, records, facility management, financial reporting and training. The application states that OPG has taken advantage of

economies of scale by consolidating staff that perform similar work and streamlining processes. OPG has proposed that the nuclear Custom IR stretch factor apply to base OM&A and allocated corporate OM&A.

The OEB directed OPG in the EB-2013-0321 decision to undertake an independent benchmarking study of corporate support functions and costs given the significant changes resulting from Business Transformation. OPG filed a benchmarking study completed by the Hackett Group.[92] Hackett reviewed the corporate support function for all OPG regulated operations. Corporate costs assigned and allocated were included in the benchmarking. The corporate support costs for 2010 and 2014 were compared to a peer group of companies in multiple industries that Hackett determined to have similar size and business complexity to OPG. The peer group consisted of 19 companies, including six nuclear operators (Ameren Corp, Areva, Arizona Public Service Company, Constellation Energy Resources, Florida Power and Light, and Public Service Energy Group).

Hackett found that while OPG's benchmark performance improved between 2010 and 2014, OPG still lagged in Executive and Corporate Services (ECS) functions. The results of the Hackett benchmarking for Information Technology, Human Resources, Finance and ECS are summarized in the following table. The data as well as the quartile results are summarized:

Table 22: OPG Corporate Cost Benchmarking Results

Corporate Function	OPG 2010	OPG 2014	Peer Median	OPG Improvement
IT Cost per End User	$12,015 (Q1)	$9, 541 (Q1)	$14,995	21%
HR Cost per Employee	$3,400 (Q3)	$3,375 (Q3)	$3,350	1%
Finance Cost (% of Revenue)	1.02% (Q4)	0.75% (Q3)	0.66%	26%
ECS Cost (% of Revenue)	3.39% (Q4)	2.75% (Q4)	1.07%	19%

Source: Exh F3-1-1 Figure 1, Exh L-6.7-Staff-169 Attachment 1

In its Argument in Chief, OPG stated that the Hackett benchmarking demonstrates that there have been significant improvements in controlling corporate support costs. OPG recognizes that ECS costs did not benchmark well, but there are factors requiring additional costs given the scope of the nuclear operations.

[92] Exh F3-1-1 Attachment 1.

Several parties proposed test period nuclear allocated corporate support cost reductions ranging from $40 million to $100 million on the basis of benchmarking performance and historical under-spending.

Findings

No submissions were filed regarding the allocation of corporate costs to the nuclear business. The OEB accepts the methodology as applied in the application.

In order to allow for “apples to apples” comparisons, the Hackett study compared costs by function; not by how they are categorized or organized at OPG or the peer comparators. This is an appropriate way to benchmark, but does create challenges as OPG has not provided any kind of cross-reference between the benchmarked categories and its organizational structure for corporate costs as set out in the table above.

During the hearing OPG was asked to provide the revenue requirement impact over the five years for OPG to achieve the 2014 median for the Finance and the ECS benchmarks. OPG calculated that the revenue requirement impact for ECS is a reduction of $307 million and the impact for Finance is a reduction of $19 million. OPG also pointed out that HR and IT costs would be below median by $27 million and $395 million respectively, which should be used to offset the higher ECS and Finance costs.[93]

The OEB does not agree that these different categories of costs are interchangeable. The OEB expects to see good performance and efficiencies in all areas of OPG business. These functions are benchmarked separately – there is no overall benchmark for corporate costs. They are also benchmarked on different bases – ECS and Finance as a percentage of company revenue, as they reflect overall management of the company, IT by cost per end user, and HR by employee.

Some parties questioned the basis on which the number of IT end users was determined as it includes many contractors’ employees on site including those working on the DRP, even if their use is limited to having access to the system for the purpose of looking at plans and drawings while on site. The OEB agrees there is some merit to this argument as the annual IT cost shown on Table 21 trends downward slightly (from $91.2 million in 2014 to $84 million in 2021) while the number of Total Nuclear FTEs (Table 23 nuclear staffing levels section) also trends downward from 8,431 in 2014 to 8,293 in 2021. The only way the cost per end user could drop by from $9,541 in 2014 to $7,652 in 2021 is if there are many more end users than those accounted for in the

[93] Undertaking J20.3.

FTEs. The OEB is not persuaded that the improvement in this metric is due to efficiencies by OPG so that it can offset poor benchmarking in other areas.

While ECS has shown some improvement, the cost of ECS as a percentage of revenue in 2014 was more than twice as much as the median. OPG was the worst performer of the peer group for ECS in both 2010 and 2014. As noted above, if ECS was at the 2014 median in the test period, the nuclear revenue requirement would be $307 million lower. OPG recognizes that its ECS costs are higher than comparators, but attributes high costs to the need to ensure safety, environmental stewardship and robust risk management for its nuclear operations.[94]

While Hackett included a broad range of functions in ECS (administrative services, transportation services, real estate and facilities management, government affairs, legal/regulatory affairs, quality management, risk management and environment, health and safety, corporate communications, planning and strategy, and executive office and procurement) a number of functions were specifically excluded from their analysis. These were security management, travel services, legal (M&A), nuclear specific costs (e.g. nuclear facilities costs), anything related to DRP, staff training, nuclear specific finance (e.g. insurance) and electricity sales and trading.[95] The OEB concludes that many of the functions OPG suggests are the cause of its ECS costs being higher than comparators are functions that were excluded from the benchmarking so they are not a justification for OPG's higher costs.

The OEB also agrees with CME's submission that the comparators in the Hackett benchmarking study, including six nuclear operators and 11 organizations with unions, faced similar operational needs. While CME submitted that a $100 million reduction related to ECS costs in the test period would approximate third quartile performance, the OEB expects OPG's performance to be closer to the median. CME also proposed an additional $19 million reduction related to the finance function.

OEB staff reviewed OPG's allocated corporate cost for the historical and test period as presented in Table 21 and in relation to the functions benchmarked by Hackett, although the analysis was limited. OEB staff submitted that some of the trends were not supported and proposed a 1% per year increase on 2014 actuals, reducing the test period revenue requirement by $40.6 million. OPG argued that the OEB staff analysis did not account for all the drivers and changes noted in the evidence and that applying a formula to an historical year is inconsistent with Custom IR.

[94] Reply Argument page 163.
[95] Exh F3-1-1 Attachment 1 pages 6-7.

SEC reviewed variances of actual corporate costs and OEB approved amounts or budgeted amounts. SEC submitted that at 2.5% reduction per year, i.e. the 2014-2016 variance, should be applied, resulting in a $55.7 million test period reduction. LPMA's submission included a similar analysis resulting in a $60.8 million reduction. OPG argued that it has provided reasons, e.g. the delay in the sale of its office building at 700 University Avenue in Toronto, for the historical period variances.

The OEB agrees that there are many factors affecting the allocated corporate costs in the test period. While there is some merit to consideration of the historical costs and variances, the OEB finds that the benchmarking results of the ECS function outweigh all other considerations. The OEB finds that OPG's ECS costs are much too high compared to the comparators who Hackett characterizes as "a custom group of companies in multiple industries that have similar size and business complexity to OPG."[96] Hackett also observed that, "OPG ECS has opportunities to peer especially in the areas of Risk Management and [Environment, Health & Safety], Procurement, and Real Estate." The OEB agrees and has used this as one of the factors underpinning a significant reduction to the nuclear OM&A related revenue requirement. Between ECS and Finance, OPG is more than $300 million above the median for the five-year test period.

The nuclear OM&A related revenue requirement will be reduced by $45 million per year on account of the corporate allocated costs.

As noted in section 8.2, the Custom IR stretch factor will be applied to the allocated corporate costs.

The OEB expects OPG to file an updated benchmarking study of corporate costs with its next cost based application. The OEB observes that OPG provided corporate support cost for Pickering in Table 20 of section 5.7. In addition to its usual evidence on corporate support costs, OPG shall file nuclear corporate support information by station for the historical and test period in the next cost based application.

5.8.2 Centrally Held Costs

Centrally held costs are allocated to the nuclear business, the regulated hydroelectric business and the unregulated business. The allocation methodology applied is the same as that applied in previous payment amount applications.

[96] Exh F3-1-1 Attachment 1 page 6.

The centrally held costs include pension and OPEB related costs (costs other than current service costs), insurance, performance incentives and IESO non-energy charges. The allocation of centrally held costs for the nuclear business is set out in Table 3 of Exh F4-1-1.

The nuclear business centrally held costs also include a negative adjustment to the test period costs to reflect the forecast differential between accrual costs and cash amounts for pension and OPEBs.

No parties opposed OPG's application with respect to centrally held costs.

Findings

The OEB agrees with the proposed allocation of centrally held costs, which is not disputed.

5.9 Compensation

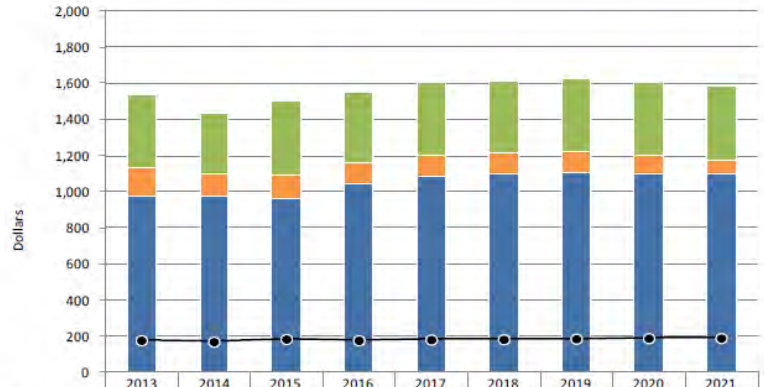
Background

This section reviews the amounts that OPG pays its nuclear (including nuclear allocated) employees. OPG's total compensation package includes wages (including wages for overtime), pensions, and other benefits. There is no "line item" for compensation in OPG's application; rather, compensation costs are incorporated into other areas such as OM&A costs. Compensation costs are a function of both the number of employees and the amount of total compensation paid to those employees.

As of the end of 2015, almost 80% of OPG's regular employees worked directly in, or in support of, OPG's nuclear facilities.[97] OPG's total compensation costs represent a very significant expense for the company: on average approximately 40% of its requested revenue requirement; in 2017 it approaches 50% of the requested revenue requirement.[98] The following chart provides a high level annual breakdown of OPG's nuclear compensation costs:

[97] OPG AIC, p. 96.
[98] OPG AIC, pp. 94-95.

Figure 3 - Compensation Costs for Nuclear Facilities



	2013	2014	2015	2016	2017	2018	2019	2020	2021
Pensions & Benefits (M$)*	399	342	417	397	407	400	405	404	405
Overtime (M$)	159	118	132	112	117	116	119	102	81
Base Salaries & Incentives (M$)	976	978	956	1,046	1,082	1,095	1,099	1,097	1,096
Total Compensation (M$)	1,534	1,438	1,506	1,554	1,606	1,611	1,623	1,603	1,582
Growth Rate (Total Compensation)	6%	-6%	5%	3%	3%	0%	1%	-1%	-1%
Total Compensation (K$ / FTE)	179	171	186	178	182	184	187	190	191
Full Time Equivalents**	8594	8432	8114	8721	8801	8761	8665	8430	8293

*Pension and benefits include current service costs and are shown on an accrual basis.
** FTE includes both regular and non-regular FTEs. The actual 2013 FTEs shown are adjusted from those provided in EB-2013-0321, J7.3, Attachment 1. The adjustment increases the number of FTEs by excluding the impact of banked overtime (overtime taken as time off rather than pay) and shows the 2013 Actual FTEs on a consistent basis with the remaining years in the table.

OPG's compensation costs are relatively flat over the test period. The total compensation paid is actually forecast to be slightly lower in 2021 than 2017, whereas the total compensation per employee is forecast to be slightly higher (the total is lower because OPG expects to have fewer employees).

OPG's nuclear workforce is approximately 90% unionized. Unionized workers are represented by either the Society or the PWU. Wages, pensions and benefits all have to be collectively bargained for OPG's unionized employees, and most parties agree that this places limitations on OPG's ability to reduce its compensation costs.

OPG's total compensation levels have been a contentious issue in previous payment amounts proceedings before the OEB. The OEB has made disallowances related to excessive compensation levels in all three previous full payment amounts proceedings: $35 million in the first payments case,[99] $145 million over two years in EB-2010-0008, and $200 million over two years in EB-2013-0321.[100]

With the exception of the two union intervenors, OEB staff and most intervenors argued for disallowances for excessive compensation in the nuclear business in this

[99] The disallowances in this case were for poor performance at the Pickering A facility generally, and were not tied directly to excessive compensation.
[100] The disallowance is this case was for both the regulated hydroelectric and nuclear businesses.

proceeding. The disallowance sought ranged from about $50 million per year to about $100 million per year. OPG and the union intervenors argued that the compensation expenses should be approved as filed.

Benchmarking

OPG commissioned benchmarking reports on both total direct compensation and pensions and benefits. It also conducted extensive benchmarking on its overall performance as a nuclear operator which, although not compensation benchmarking *per se*, is still relevant to this analysis.

Total Direct Compensation

OPG retained Willis Towers Watson (WTW) to benchmark both its total direct compensation, which includes average salary, target bonus and other applicable allowances. It does not include overtime, the share performance plan, or the lump sum payment that was paid to unionized employees in exchange for certain changes to the pension plan.

WTW also benchmarked OPG's pensions and other benefits, which are reviewed in the next section.

For total direct compensation, WTW measured the PWU, the Society, and Management in three categories: utility, nuclear authorized, and general industry. OPG job functions were measured against comparable positions in comparable organizations. Overall, the WTW study concluded that OPG's total direct compensation was essentially at benchmark. This is an improvement over the benchmarking results in previous proceedings, which had showed OPG to be above benchmark to varying degrees.

Several parties critiqued portions of the WTW study. Significant elements of OPG's compensation package were excluded from the study: overtime (which averages more than $100 million per year over the test period) and the share performance plan and lump sum payment (which cost a combined $92 million over the test period). There was also concern regarding the low number of positions that were benchmarked in some areas, and OPG's use of the 75th percentile as its benchmark standard for the nuclear authorized segment. Parties also observed that, although the overall results show OPG to be close to benchmark, in some areas (particularly general industry) OPG is well above the benchmark.

Pensions and Benefits

OPG offers its employees several pension and benefits plans. For retired employees, there are the registered pension plan, other post-employment benefits (OPEB), and a

supplemental pension plan. Current employees also have a comprehensive benefits package. Pensions and benefits form a significant component of OPG's total compensation costs, and indeed of its total revenue requirement. Over the test period pensions and OPEBs for the nuclear business are forecast to cost an average of $329 million per year on a cash basis, and $355 million on an accrual basis.[101] These figures do not include the costs of benefits for current employees; as shown in the chart above, the total costs including benefits for current employees average over $400 million per year over the test period on an accrual basis.

The sustainability of OPG's pensions and benefits has improved in recent years. This is largely the result of increased pension contributions that were negotiated with the Society and the PWU in the most recent round of collective bargaining. Despite this, no party disputes that the cost of OPG's pensions and benefits remains above benchmark.

OPG filed several benchmarking reports related to its pensions and benefits. The WTW report included a section on pensions and benefits (which included both OPEBs and benefits for current employees). WTW concluded that OPG's pensions and benefits were 32% more generous than their comparators. OPG also filed a Benefit Index Report prepared by AON Hewitt. Although portions of the report are confidential, the conclusion was that overall OPG's benefits were between the second and third most generous amongst its comparators, and were 11% above market.[102]

OPG calculates an employer-employee contribution ratio for its registered pension plan. Both the Auditor General and the *Report on the Sustainability of Electricity Sector Pension Plans* (the Leech Report) have recommended that OPG's contribution ratio should be approximately 1:1, which is typical in the public service. According to OPG, its contribution in 2015 was approximately 3:1, and it is expected to be approximately 2:1 in 2017. (Further information on the expected ratio for the rest of the test period is confidential, but the information is available in the confidential exhibit, Exh L-6.6-Staff-157, Attachment 1, and is summarized on pages 111-112 of OEB staff's submission.)

Several parties argued that the methodology used by OPG to calculate the contribution ratio is misleading, and that the true ratio is much higher. Parties argued that OPG excluded significant employer expenses from its calculation, such as special payments and the cost of OPEBs. Depending on exactly what employer expenses are included in the calculation, the contribution ratio was calculated to be closer to 3:1 or 4:1 in 2018.[103]

[101] OEB staff submission, Table 26, page 106.
[102] Exh L-6.6-Staff-157 Attachment 2 page 31.
[103] See, for example, OEB staff submission pages 110-111.

Nuclear Performance Benchmarking

In addition to the compensation specific benchmarking reports, OPG also filed benchmarking analysis on its overall performance as a nuclear operator. As detailed in section 5.4, OPG's overall results were poor. As noted in the section on nuclear OM&A overall nuclear benchmarking has been taken into account as one of the factors leading to a reduction on approved OM&A.

Staffing Levels

As previously noted, compensation is a function of both the number of staff and remuneration. The following table summarizes historic and test period staffing levels for the nuclear business. The data are listed for operations and DRP, as well as for employee group. The table includes 2016 budget and actual Full Time Equivalents (FTE).

Table 23: Nuclear Business Full Time Equivalents

Nuclear FTE	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2016 Actual	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Operations												
Regular	7,404.9	6,100.7	5,870.7	5,626.7	5,430.4	5,788.6	5,341.1	5,710.8	5,666.2	5,602.1	5,504.1	5,394.7
Non-Regular	583.7	436.0	496.9	578.1	670.0	666.7	843.8	614.4	646.6	632.2	526.8	420.4
Total Nuclear Operations	**7,988.6**	**6,536.7**	**6,367.6**	**6,204.8**	**6,100.4**	**6,455.3**	**6,184.9**	**6,325.2**	**6,312.8**	**6,234.3**	**6,030.9**	**5,815.1**
Corporate												
Nuclear Allocated	876.1	2,037.2	1,919.5	1,884.4	1,628.9	1,773.3	1,659.8	1,742.8	1,703.7	1,679.8	1,659.0	1,656.2
Total Operations&Corp	**8,864.7**	**8,573.9**	**8,287.1**	**8,089.2**	**7,729.3**	**8,228.6**	**7,844.7**	**8,068.0**	**8,016.5**	**7,914.1**	**7,689.9**	**7,471.3**
DRP												
Regular	208.1	210.9	282.0	307.2	329.7	427.6	422.6	587.2	599.9	620.5	589.5	597.8
Non-Regular	18.4	14.2	24.6	35.3	60.7	73.5	112.7	153.2	152.2	137.4	157.7	230.1
Total DRP	**226.5**	**225.1**	**306.6**	**342.5**	**390.4**	**501.1**	**535.3**	**740.4**	**752.1**	**757.9**	**747.2**	**827.9**
TOTAL NUCLEAR*	**9,091.2**	**8,799.0**	**8,593.7**	**8,431.7**	**8,119.7**	**8,729.7**	**8,380.0**	**8,808.4**	**8,768.6**	**8,672.0**	**8,437.1**	**8,299.2**
Management	950.7	952.1	960.8	929.1	890.3	926.9		958.5	950.2	945.7	933.6	920.6
Society	2,908.7	2,755.0	2,615.5	2,547.8	2,484.0	2,753.9		2,784.5	2,769.9	2,708.1	2,633.3	2,592.0
PWU	5,152.0	5,005.6	4,957.1	4,885.2	4,633.2	4,904.3		4,871.4	4,853.2	4,855.3	4,681.9	4,551.5
EPSCA	79.8	86.3	60.2	69.6	106.2	135.6		186.7	188.1	155.6	181.1	229.1
TOTAL NUCLEAR*	**9,091.2**	**8,799.0**	**8,593.7**	**8,431.8**	**8,113.7**	**8,720.7**		**8,801.2**	**8,761.4**	**8,664.7**	**8,429.9**	**8,293.2**

Source: Exh F2-1-1 Table 3, Exh F4-3-1 Appendix 2K, Exh F2-2-1 Table 2 - EB-2013-0321 and EB-2016-0152, Undertaking J13.3, J14.6

EPSCA - Electrical Power Systems Construction Association

*OPG proposed to address the difference of app. 7 FTE (2015 to 2021) by reducing revenue requirement by app. $1 million through the payment order process (L-6.6-Staff-139)

OPG's Business Transformation project restructured the company around a centre led model, reducing OPG regular headcount by nearly 2,700 positions between 2011 and 2015. The impact of Business Transformation is evident in the trend in total nuclear FTE and nuclear allocated corporate FTE in the period 2011 to 2015.

The OEB directed OPG to conduct an examination of nuclear staffing levels, after considering weak nuclear operations benchmark results in the EB-2010-0008 proceeding. OPG retained Goodnight Consulting Inc. (Goodnight), to benchmark OPG nuclear staffing, and the study was filed in the EB-2013-0321 proceeding. The results of that study, and the Goodnight study filed in this proceeding are summarized below.

Table 24: Goodnight Benchmark FTE

Nuclear FTE	2011	2013	2014
OPG Functional Staff	5,956	5,587	5,421
Goodnight Benchmark	5,090	5,193	5,208
Variance	**866**	**394**	**213**

OPG stated that 2016 staffing levels were at benchmark as OPG sustained higher than expected attrition and experienced hiring lags.[104] As the industry benchmark levels have risen and will continue to rise due to regulatory factors such as increased security

[104] Tr Vol 13 page 49.

needs, cybersecurity, Fukushima, etc., it is OPG's view that the test period staffing levels are appropriate.

Goodnight benchmarked OPG nuclear staff who supported steady state operations. A large number of staff were excluded, including those responsible for CANDU specific work, DRP, and corporate support not directly supporting the nuclear program. Goodnight did, however, benchmark certain contractors who provide baseline support.

The Society agreed with OPG's analysis of 2016 staffing levels and listed initiatives underway to improve efficiency in its submission. OEB staff and SEC questioned whether OPG had achieved benchmark staffing levels in 2016 as only 60% of nuclear staff were benchmarked, and also questioned the level of nuclear staffing in the test period.

Findings

The evidence in this proceeding demonstrates that OPG has made some positive steps towards controlling its overall compensation costs, both in terms of the amount it pays in relation to the relevant benchmarks, and the overall number of employees. However, for the reasons provided below, the OEB finds that forecast total compensation is in the range of $40 million to $50 million too high for each year of the test period. The OEB's findings on OM&A reflect this finding. As there is some overlap between corporate allocated costs and overall compensation the OEB will reduce nuclear OM&A by $30 million per year with respect to overall compensation

The OEB will not make any specific disallowances on account of nuclear operations staffing levels. Although the levels arguably remain slightly high in some areas, and the benchmarking results continue to show slight overstaffing, the OEB is satisfied that OPG has made significant progress since 2011. The Business Transformation Initiative achieved significant results. However, the OEB is concerned that the gains made through Business Transformation should be maintained, and cautions that OPG must remain vigilant and ensure staffing levels remain appropriate. The OEB will continue to review this area carefully in future proceedings, and believes there may still be room for improvement.

This is distinct from the nuclear allocated corporate employee levels which appear to be too high, although a conclusion on appropriate staffing levels cannot be made as the corporate costs benchmarking discussed in section 5.8 reviews overall costs and does not distinguish between staffing levels and compensation per employee. The OEB's findings on corporate allocated costs can be seen above.

Much of the benchmarking and other analysis divided OPG's compensation package into two broad categories: total direct compensation (wages, bonuses and other allowances), and pensions and benefits. The OEB will examine each of these categories in turn.

Total Direct Compensation

Benchmarking

OPG has been conducting benchmarking of its compensation costs for many years. In this proceeding OPG filed a comprehensive compensation benchmarking study prepared by WTW (the WTW Report). The WTW Report reviewed both total direct compensation, and pensions and benefits.

The WTW Report divided OPG's workforce into PWU, Society, and management. It further divided job types into three broad categories: utility, nuclear authorized, and general industry. Although there was considerable variation when considering both employee type and job type, overall, WTW found that OPG paid approximately 5% more than the comparable benchmarks. Given the nature of benchmarking analysis, WTW considers +/- 10% to be within benchmark, and by that measure OPG is essentially at benchmark.

The OEB accepts that, as a general matter, benchmarking provides high level, directional analysis, and should not be expected to measure precisely what OPG should be paying its employees. As described below, however, the OEB does not accept all the results of the benchmarking as being appropriate targets for OPG and will make findings to reduce revenue requirement accordingly. In particular, the OEB has concerns with respect to aspects of compensation that were excluded from the analysis (in particular lump sum payments and the share purchase plan), the relative paucity of workers that were benchmarked in the "general industry" category, as well as the use of 75th percentile rather than 50th percentile to benchmark the nuclear authorized category of employees.

In exchange for certain concessions to pensions and benefits that were negotiated in the most recent round of collective bargaining, OPG agreed to make certain lump sum payments and make available a share purchase plan to its unionized employees. The total cost of these measures for the regulated nuclear business over the test period is $92 million. WTW did not include these payments in its analysis of total direct compensation as they benchmarked 2015 and the lump sum payments and share purchase plan started for the PWU in 2016 and for the Society in 2017. OPG also noted

that WTW does not routinely collect this type of data from organizations, and therefore could not benchmark it.[105]

The OEB's view is that the lump sum payments and share purchase plan should be added to the compensation benchmarked by WTW as they form part of the actual direct compensation that OPG's employees receive during the test years. They form a small but material portion of employee compensation and therefore should be accounted for.

The OEB is also concerned about the relatively few positions that WTW was able to benchmark under the "general industry" category. The general industry group includes workers that do not require particular utility or nuclear authorized specialized skills – the comparators selected by WTW were both private and public positions that required a large range of skill sets, with an emphasis on large Ontario employers. The WTW analysis showed that OPG greatly overcompensated its unionized workers under this category compared with its peers: both PWU and SEP were 27% above the benchmark. Unfortunately WTW was only able to benchmark 69% of general industry positions for the PWU (versus 81% of PWU positions overall) and only 51% of general industry positions for the Society (versus 74% overall). General industry positions, therefore, are proportionately under-represented in the study. The OEB believes that it is reasonable to infer that this tends to skew the overall results somewhat – had more general industry positions been included in the analysis, it appears that OPG might be more than 5% above market.

Although the 50th percentile is used as the benchmark for most positions, OPG chose (with WTW's support) to use the 75th percentile as the appropriate comparator for its nuclear authorized segment. OPG argued that this was appropriate because of the challenges associated with CANDU technology, and the fact that OPG's operators worked in stations with four (Darlington) and six (Pickering) units, whereas most of the comparators had only one or two units.

The OEB does not accept this rationale, and finds that the appropriate comparator for the nuclear authorized segment (and all segments) should be the 50th percentile. As its name suggests, the nuclear authorized segment is composed of staff working in a nuclear plant environment with specialized nuclear skills. That is the very reason they were chosen as comparators. Neither OPG nor WTW provided a convincing rationale as to why the number of units or the CANDU technology would mean that OPG's nuclear authorized workers should be entitled to higher compensation than other nuclear authorized workers, let alone to the 75th percentile.

[105] Reply Argument page 146.

The OEB finds that there should be disallowances reflected in nuclear revenue requirement related to nuclear compensation being over the 50th percentile. Parties argued that the evidence supports disallowances in the range of $30 million[106] to $47 million.[107]

Both OPG and the PWU submitted that Bruce Power is OPG's closest comparator for compensation. Bruce Power operates CANDU units in Ontario and is staffed by the same unions. The WTW benchmarking shows that Bruce Power provides higher wages for the PWU and Society. While this compensation information for Bruce Power is informative, the OEB finds that it is of limited value. The data relate to wages, not overall compensation, and therefore provide only part of the overall picture. OPG has not filed a nuclear operations benchmarking study for Bruce Power to inform the OEB about Bruce Power's overall nuclear performance relative to OPG, in other words the OEB does not have information about Bruce's relative efficiency. The OEB also finds that the broader compensation report by WTW, which includes many operators, is more informative than OPG's one to one comparison with Bruce Power.

Pensions and benefits

OPG offers its employees a comprehensive package of benefits (for both current employees and retired employees), a generous registered pension plan, and a supplemental pension plan. The costs for these programs vary depending on whether the cash or accrual accounting method is employed, but in any event amounts to hundreds of millions of dollars per year. This is a significant component of OPG's overall revenue requirement.

The OEB finds that OPG's overall pension and benefits costs are clearly excessive, and it will make disallowances as described below. There is voluminous evidence demonstrating that the costs of these programs are well above market. It would not be reasonable, in the OEB's view, to require ratepayers to pay these excessive costs.

Benchmarking

The WTW report included a section on pensions and benefits. It concluded that the overall value of OPG's pension and benefits programs was well above market median – in fact 32% above.[108]

[106] JT3.2.
[107] SEC Submission page 89.
[108] Exh F4-3-1 Attachment 2, page 27.

OPG also retained AON Hewitt to prepare a Benefit Index Report. Although many of the details of this report have been found by the OEB to be confidential and therefore cannot be disclosed on the public record, the overall conclusions reached were similar to those from the WTW Report: OPG's pre- and post-retirement benefits were amongst the most generous of all the companies measured, and were (overall) 11% above market.

It is not only the OEB that has shown concern about the cost of OPG's pension plan. The Leech Report was commissioned by the provincial government to review the sustainability and affordability of a number of public sector pension plans, including OPG's. The report was released in 2014 and contained some troubling findings, including that OPG's defined benefit pension plan was generous, expensive and inflexible, that it was not offset by lower salaries, and that the plan was "far from sustainable". It stated that OPG should aim to achieve a 1:1 employer:employee contribution ratio by about 2019.

The Auditor General of Ontario has also commented on OPG's pension plans, in particular its contribution ratio. In its 2013 report the Auditor General noted that OPG's contribution ratio was between 4:1 and 5:1, whereas in the Ontario public service generally it was 1:1.

OPG has made some improvements to the sustainability and affordability of its pension plan, but the OEB is not satisfied with OPG's contribution ratio over the test period.[109]

The OEB remains concerned about OPG's high pension and benefits costs. Although some improvement has been made, OPG's costs remain well in excess of its comparators. The contribution ratio for 2017 is at least 2:1, double that recommended by the Auditor General, the Leech Report, and the OEB in previous proceedings. The expected contribution ratio throughout the rest of the test period was filed in confidence, but is known to the OEB and the parties that signed the OEB's Undertaking with respect to confidentiality.[110] The OEB also notes that the record is not clear with respect to the calculation of employer:employee contribution ratios. The OEB recognizes that any savings to pensions and benefits costs need to be negotiated with OPG's unions, and that this can be a slow and difficult process. Ultimately, however, the question becomes who should pay for these excessive costs: the shareholder or ratepayers? The OEB

[109] Much of the information relating to the specific expected contribution ratio in specific years was filed confidentially, and therefore cannot be discussed in detail in this publicly issued Decision. However, underlying information in support of this finding can be found, for example, at Ex. L, Tab 6.6, Schedule 1, Staff-157; Exhibit L, Tab 6.6, Schedule 1, Staff-157, and Transcript volume 16, pages 163-171.
[110] *Ibid*.

finds that there should be disallowances reflected in nuclear revenue requirement related to excessive pension and benefits costs. The precise amount is difficult to estimate as OPG indicated that it was not able to calculate the revenue requirement impact of having its overall pension and benefits plans at benchmark. However, the OEB finds it could be at least as high as $20 to $30 million per year.

Conclusion with respect to compensation

Although OPG has made some progress in controlling its overall compensation costs, overall the costs remain above benchmark and are not reasonable. For the reasons enumerated above, the OEB will reduce OPG's overall OM&A budget by $30 million per year on account of excessive compensation. This includes direct compensation, and pensions and benefits. This is in addition to the disallowance of $45 million per year for excessive corporate allocated costs discussed in section 5.8. In making this finding the OEB has taken into account that the cumulative ranges of costs it has found to be excessive are approximately $100 million to $120 million per year. The OEB is confident that a combined reduction of $75 million will allow for any overlap between categories (compensation, pensions and benefits also apply to corporate allocated nuclear employees) and uncertainty about the benchmarking data and pension contribution calculations.

The OEB expects compensation benchmarking with the next cost based application. The benchmarking shall include a detailed overtime analysis. The OEB also expects a staffing benchmarking study that will incorporate contractor FTEs following the Goodnight methodology. In addition, OPG shall file pension and OPEB evidence that clearly sets out the elements included and excluded in its determination of employer:employee contribution ratios.

5.10 Depreciation

The EB-2010-0008 decision directed OPG to file an independent depreciation study in the next proceeding. The OEB accepted the evidence prepared by Gannett Fleming for EB-2013-0321. OPG states that its determination of depreciation and amortization in this is the same as in the previous proceeding. There have been no changes in asset service lives but the end of life for the nuclear stations have been revised.

The EB-2012-0002 and EB-2013-0321 payment amount orders require OPG to file an accounting order application if OPG proposes to change station end of life for depreciation and amortization purposes, the change impacts the calculation of nuclear

liabilities (other than as a result of an ONFA Reference Plan update),[111] and the impact exceeds $10 million. At the end of 2014, OPG filed an accounting order application, EB-2015-0374, in which it advised the OEB that due to revisions in the DRP schedule, finalization of the Amended and Restated Bruce Power Refurbishment Implementation Agreement and confidence achieved through work on the Fuel Channel Life Extension Project relating to Pickering, station end of life has been extended. The OEB directed OPG to establish the Impact Resulting from Changes in Station End-of-Life Dates (December 31, 2015) Deferral Account. The change in nuclear station end of life is summarized in the following table.

Table 25: Nuclear Station End-of-Life

	Effective January 1, 2013	Effective December 31, 2015
Darlington	December 31, 2051	December 31, 2052
Pickering Units 1&4	December 31, 2020	December 31, 2020
Pickering Units 5-8	April 30, 2020	December 31, 2020
Bruce A Units 1-4	December 31, 2048	December 31, 2052
Bruce B Units 5-8	December 31, 2019	December 31, 2061

Source: Exh F4-1-1, page 3

The historical and proposed test period depreciation and amortization are summarized in the following table. The increase in 2020 is related to the planned return to service of Darlington Unit 2, while the decrease in 2021 reflects the current end of life of Pickering, i.e. December 31, 2020. The Exh N1-1-1 impact statement reflected the accounting impacts of the 2017 ONFA Reference Plan, while the Exh N2-1-1 impact statement reflected the impact of excluding the capital in-service amounts for the D2O project.

Table 26: Depreciation and Amortization

$million	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Application as filed	270.1	285.3	298.0	293.6	346.9	378.7	384.0	524.9	338.1
Exh N1-1-1 - Change in ARC Amortization					27.0	27.0	27.0	27.0	-10.8
Exh N2-1-1 - Change in Depreciation for D2O Project					-6.9	-10.7	-10.7	-10.7	-10.7
Depreciation and Amortization	**270.1**	**285.3**	**298.0**	**293.6**	**367.0**	**395.0**	**400.3**	**541.2**	**316.6**

No submissions were filed objecting to the calculation of depreciation expense. While OPG's next independent review of service life would be scheduled for 2018, OPG

[111] ONFA refers to the Ontario Nuclear Funds Agreement, which is discussed below.

proposed to file the study after Darlington Unit 2 is scheduled to return to service in 2020. The study would be conducted in 2021 and would be based on 2020 year-end asset net book values. OEB staff did not oppose the delay in filing the independent review as there is the requirement to file an accounting order in the event of material change in service life, and regular review of station life and certain asset classes by OPG's Depreciation Review Committee.

Findings

The depreciation expense in the application reflects December 31, 2020 end of life for Pickering while the balance of the application reflects Pickering life to 2022 - 2024. The OEB notes that a similar circumstance occurred in the EB-2010-0008 proceeding wherein depreciation expense reflected Pickering life to 2014 - 2016, while the application also sought expense related to Pickering 2020. Previous payment amount orders have established that OPG will apply for an accounting order if there are material changes to service life estimates.[112] The OEB finds that there is no compelling reason to deviate from these previous depreciation treatments.

OPG states that it will not conduct an independent review of service life in 2018, but will conduct the review in 2021 after the completion of Darlington Unit 2 refurbishment. The OEB has no concerns with the proposal.

The depreciation expense that underpins the nuclear test period revenue requirement will reflect the OEB's findings elsewhere in this Decision.

5.11 Income and Property Taxes

5.11.1 Background

OPG uses the taxes payable method for determining regulatory income tax for the regulated facilities. Regulatory income taxes are determined by applying the statutory tax rates to the regulatory taxable income of the regulated facilities and reducing the resulting amount by recognized investment tax credits (ITCs) for qualifying Scientific Research and Experimental Development (SR&ED) expenditures. OPG states that its determination of income tax expense in this proceeding is the same as in the previous proceeding. The historical and proposed income tax and property tax for the nuclear business are summarized in the following table.

[112] EB-2012-0002 and EB-2013-0321.

Table 27: Income and Property Tax

$million	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Income Tax Expense	-76.4	-61.5	-31.8	-18.7	-6.7	-18.4	-18.4	59.2	-5.0
Property Tax Expense	13.6	13.2	13.2	13.5	14.6	14.9	15.3	15.7	17.0

Source: Exh F4-2-1 Table 2, Exh N2-1-1

The negative expense in four years of the test period is largely the result of forecast SR&ED ITCs and carryover of projected regulatory tax losses arising in 2018 and 2019. The increase in 2020 is related to impacts associated with return to service of Darlington Unit 2. Submissions were filed on utilization of SR&ED ITCs and property tax. The decrease in 2021 is largely due to a reduction in depreciation and amortization expense related to the Pickering station.

5.11.2 SR&ED ITCs

OEB staff noted that in the period 2013 to 2015, the nuclear business was attributed losses for tax purposes. Therefore, the nuclear SR&ED ITCs were applied against hydroelectric taxes during this period. OPG has forecast $18.4 million of SR&ED ITCs for regulatory purposes annually over the test period to reduce regulatory tax expenses.[113] As the hydroelectric payment amounts will be set by an IRM formula in the test period, OEB staff submitted that the SR&ED ITCs should be utilized by the business segment that earned the ITCs and be carried forward if unused in a particular year. OEB staff submitted that this would be consistent with the cost causation regulatory principle.

OEB staff also observed a consistent variance (i.e. under-forecasting) between forecast SR&ED ITCs and actual for the period 2013 to 2015, and between forecast SR&ED ITCs in the test period and credits included in the most recent OPG business plan. OEB staff submitted that the credits in the most recent business plan should underpin revenue requirement and that the existing Income and Other Tax Variance Account could record variances between forecast and actual. LPMA supported the OEB staff submission.

OPG replied that external specialists review expenditures to identify qualifying work for SR&ED ITC claims. It is not possible to forecast ITCs with a high level of precision. However, OPG did not object to prospectively truing up nuclear SR&ED ITCs using a new SR&ED ITC variance account. OPG submitted that using the Income and Other

[113] Exh N2-1-1, Table 2.

Tax Variance Account would be inconsistent with the OEB approved settlement agreement and with the original intent of that account.

With respect to carry-forwards, OPG replied that this approach would not consistently produce a full true up outcome, and could result in double counting if the proposed variance account is approved. OPG also replied that adjusting the test period revenue requirement for SR&ED ITCs to reflect the most recent OPG business plan would be arbitrary and selective. Should the OEB proceed with the new variance account, the adjustment would not be required.

Findings

The OEB is asked to consider the utilization of SR&ED ITCs against regulatory tax expense. The matter has been made more complex by the different rate-setting methodologies in the test period for the hydroelectric and nuclear businesses.

The OEB accepts OPG's position that it is difficult to forecast ITCs with precision as determinations of qualified SR&ED claims are made by external specialists after the fact.[114] The OEB finds that the carry-forward mechanism proposed by OEB staff introduces complexities and may not produce a full true-up effect.

While the 2017-2019 business plan forecasts SR&ED ITCs that are higher than the application, the OEB has determined that a true-up mechanism is the appropriate way to deal with the SR&ED ITCs in the test period. The OEB agrees that a new account is required as the purpose of the existing Income and Other Taxes Variance Account is to record variances related to changes in tax rates or rules, new administrative practices and assessments. The new SR&ED ITC Variance Account will record the tax expense impact as a result of the difference between actual SR&ED ITCs as determined after any tax audits and the forecast SR&ED ITCs included in payment amounts for the nuclear business. The new account will be effective as of the effective date for payment amounts in this proceeding. The OEB directs OPG to file a draft accounting order for the new variance account.

The rate-setting methodologies for the hydroelectric and nuclear businesses beyond 2021 are not certain. OPG's next application should consider the utilization of SR&ED ITCs and explain its proposal. However, the OEB notes that the majority of SR&ED ITCs are earned by nuclear. The 2013-2016 hydroelectric SR&ED ITCs was about $0.2 million per year.[115]

[114] Reply Argument page 169.
[115] Exh L-6.10-Staff-188.

The income taxes that underpin the nuclear test period revenue requirement will reflect the OEB's findings elsewhere in this Decision.

5.11.3 Property Tax

LPMA noted that the OEB approved property tax for the nuclear business for 2014 and 2015 were 11% and 20%, respectively, higher than the actual costs. This amounted to $1.8 million in 2014 and $3.2 million in 2015. LPMA submitted that the OEB should either reduce the property taxes by $2 million per year to reflect the tendency to over forecast these costs, or include the property taxes in the costs to which the stretch factor is applied.

OPG replied that inputs to the forecast of property tax are unchanged from previous proceedings. OPG further noted that 2016 property taxes were higher than budget.

Findings

The OEB has reviewed the LPMA submission proposing a reduction in the property tax forecast or inclusion in the expenses subject to the Custom IR stretch factor. On the basis of OPG's application and the reply argument stating that 2016 property tax was higher than budget, the OEB is satisfied that the property tax proposed for the test period is appropriate.

5.12 Bruce Lease – Revenues and Costs

OPG leases the Bruce A and Bruce B generating stations and associated lands and facilities to Bruce Power. Sections 6(2)9 and 6(2)10 of O. Reg. 53/05 set out the payment amount requirements related to Bruce:

> 6(2)9 The Board shall ensure that Ontario Power Generation Inc. recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations.
>
> 6(2)10 If Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations exceed the costs Ontario Power Generation Inc. incurs with respect to those Stations, the excess shall be applied to reduce the amount of the payments required under subsection 78.1 (1) of the Act with respect to output from the nuclear generation facilities referred to in paragraphs 3, 4 and 5 of section 2.

The EB-2007-0905 decision found that the Bruce nuclear facilities should not be treated as if they were regulated facilities. The current basis of accounting used for the Bruce nuclear facilities revenues and costs is USGAAP for non-rate-regulated entities. The

EB-2007-0905 decision also approved the Bruce Lease Net Revenues Variance Account.

On December 3, 2015, the Province announced that an updated contract had been executed between the IESO and Bruce Power to enable the refurbishment of Bruce Units 3-8 (the Amended and Restated Bruce Power Refurbishment Implementation Agreement). In support of these planned refurbishments, an amended Bruce lease agreement was executed by OPG and Bruce Power on December 4, 2015 (2015 Lease Amendment) that extended the lease period in line with the estimated post-refurbishment end-of-life dates of the Bruce units.

The historical and forecast Bruce Lease net revenues are summarized in the following table. The Exh N1-1-1 impact statement revised the test period net revenues for the 2017 ONFA Reference Plan. As discussed in section 5.13 regarding nuclear liabilities, the ONFA Contribution Schedule was approved on February 28, 2017. In Undertaking J21.2, OPG provided the impact of the new contribution schedule and a further revenue requirement reduction related to a year end adjustment to the asset retirement obligation. OPG proposed to record the difference between Exh N1-1-1 and Undertaking J21.2 in the Bruce Lease Net Revenues Variance Account.

Table 28: Bruce Lease Revenues and Costs

$million	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Revenues	228.4	307.5	491.0	237.4	216.0	210.9	208.5	219.8	188.7
Costs	222.3	202.2	315.2	303.4	232.9	228.0	235.9	243.5	226.8
Net (Exh G2-2-1, N1-1-1)	**6.1**	**105.3**	**175.8**	**-66.0**	**-16.9**	**-17.1**	**-27.4**	**-23.7**	**-38.1**
Net (Undertaking J21.2)					**-5.5**	**-7.3**	**-20.6**	**-20.0**	**-40.3**

Source: Exh G2-2-1 Table 1, Exh N1-1-1 Table 7, Undertaking J21.2 Attachment 1 Table 1

OAPPA submitted that 50% of the proposed Bruce Lease Net Revenue loss should be disallowed. OAPPA argued that the principal reason for the underlying loss is the 2015 Lease Amendment which was negotiated with a privately owned, unregulated corporation. OPG argued that OAPPA's submission has no legal merit, and referred to the requirements of O. Reg. 53/05 with respect to cost recovery for the Bruce facilities.

As noted in the Nuclear Liabilities section, section 5.13, OEB staff and several intervenors submitted that the impacts of the new ONFA Contribution Schedule and year end asset retirement obligation adjustment should be reflected in revenue requirement and not in variance accounts. OPG does not oppose these submissions.

The question of whether OPG's forecast of non-energy revenues to be derived from its nuclear business other than the Bruce Lease Net Revenues (issue 7.1) was fully settled.

Findings

The OEB agrees with the parties that the impact of the new ONFA Contribution Schedule and year end ARO adjustment should be reflected in revenue requirement and not recorded in the Bruce Lease Net Revenues Variance Account. While the information and update related to nuclear liabilities was only available in February 2017, the OEB finds that there is no reason not to reflect current information in the revenue requirement. The net amounts of the Bruce lease revenues and costs as set out for the test period in Undertaking J21.2 are approved. The OEB's findings with respect to nuclear liabilities, including revenue requirement methodology, are in section 5.13.

The OEB rejects OAPPA's submission to disallow 50% of the proposed Bruce Lease Net Revenue loss. The OEB's role with respect to Bruce revenues and costs is set out in O. Reg. 53/05. Section 6(2)9 of O. Reg. 53/05 is clear that the OEB must ensure recovery of all the costs OPG incurs with respect to the Bruce Nuclear Generating Stations.

5.13 Nuclear Liabilities

Background

OPG is responsible for ongoing and long-term management of nuclear waste and decommissioning of Pickering, Darlington and the Bruce Nuclear Generating Stations. The cost of nuclear liabilities is determined by the Ontario Nuclear Funds Agreement (ONFA) Reference Plan which is updated every five years. The ONFA sets out OPG's funding obligations for nuclear liabilities through contributions to two segregated funds: the Decommissioning Fund and the Used Fuel Fund. The present value of the costs is recorded as an Asset Retirement Obligation (ARO) in OPG's financial statements.

In addition to the ONFA, O. Reg. 53/05 sets out requirements related to nuclear liabilities and Bruce. The definition section sets out that "nuclear decommissioning liability" means the liability of OPG for decommissioning its nuclear generation facilities and the management of its nuclear waste and used fuel:

> Section 5.2
>
> Nuclear liability deferral account
>
> (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under 78.1 of the Act, the revenue requirement impact of changes in its total nuclear decommissioning liability between,

(a) the liability arising from the approved reference plan incorporated into the Board's most recent order under section 78.1 of the Act; and
(b) the liability arising from the current approved reference plan. O. Reg. 23/07, s. 3.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 23/07, s. 3.

Section 6(2)8

The Board shall ensure that Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan.

Section 6(2)9

The Board shall ensure that Ontario Power Generation Inc. recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations.

The revenue requirement methodology for nuclear liabilities is complex and was established in the first payment amounts proceeding, EB-2007-0905. The recognition of an ARO for accounting purposes gives rise to offsetting capitalized costs called the Asset Retirement Cost (ARC), and the value recorded for the ARO grows with the passage of time (accretion expense). The EB-2007-0905 decision approved a methodology that recognizes a return on rate base associated with ARC for Pickering and Darlington that is limited to the weighted average accretion rate, which is currently 4.95%.[116] This accretion rate is applied to the lesser of the forecast average unfunded nuclear liabilities (UNL) or the average unamortized ARC. In addition, the portion of unamortized average ARC in excess of the average UNL, if any, receives a return on rate base at the approved weighted average cost of capital. Other costs approved for recovery are the annual depreciation and amortization related to the ARC, and annual costs related to incremental nuclear waste generated by the operating facilities in each period (the latter is also referred to as internally funded nuclear liability programs).

For Bruce, which is not rate-regulated by the OEB, a GAAP based approach was approved. The Bruce methodology is similar to that used for Pickering and Darlington with the main distinction being that the Bruce methodology does not provide for a return on rate base. Instead, it recognizes the GAAP based accretion expense on the ARO less the earnings on the segregated funds. The EB-2007-0905 methodologies have been applied in all subsequent payment amount proceedings.

[116] Exh N1-1-1.

Application

The application as originally filed on May 27, 2016, was based on the 2012 ONFA Reference Plan. OPG sought recovery of $2,293.4 million for nuclear liabilities in the test period for the regulated nuclear facilities and for Bruce.

As part of the impact statement filed on December 20, 2016, OPG calculated the projected cost impacts and revenue requirement impacts of the 2017 ONFA Reference Plan which was approved by the Province in December 2016. The revenue requirement for nuclear liabilities was revised to $1,808.0 million. The major contributing factor to the reduction is lower used fuel disposal costs reflecting a "new, more cost effective container design and engineered barrier concept to house used nuclear fuel for disposal, as well as a later planned in-service date for Canada's proposed used fuel deep geologic repository."[117]

The Province subsequently approved the ONFA Contribution Schedule on February 28, 2017. As described in an update to Exh C2-1-2 filed on March 22, 2017, the nuclear liabilities in aggregate are fully funded from an ONFA perspective, however the funding obligations related to the regulated facilities were underfunded while those related to the Bruce facilities were overfunded. The approved ONFA Contribution Schedule rebalances the funds at a station level. The after tax impact of the contribution change is a reduction in the revenue requirement of $170.8 million for the regulated facilities, offset by a decrease in Bruce lease net revenues of $51.2 million.

In Undertaking J21.2, OPG provided a summary of the complete revenue requirement impact of the contribution change, plus a further $185 million reduction to the revenue requirement primarily due to a year end adjustment to its asset retirement obligation as reflected in its 2016 audited consolidated financial statements. The net after tax result is a decrease of $304.7 million and a total nuclear liability revenue requirement of $1,503.3 million. As these changes occurred late in the proceeding, OPG proposed that the impacts be recorded in the Nuclear Liability Deferral Account and the Bruce Lease Net Revenues Variance Account. However, in cross-examination, OPG stated that the net credit could alternatively be reflected in the payment order process.[118] OEB staff and several intervenors submitted that the impacts should be reflected in test period revenue requirement.

[117] Exh N1-1-1 page 14.
[118] Tr Vol 21 pages 42-43.

Status of the Segregated Funds

On January 19, 2017, SEC requested additional written evidence on the funded status of the segregated funds. SEC's position was that its review of the Exh N1-1-1 impact statement filed on December 20, 2016 demonstrated that a segregated fund contribution holiday had arisen. In Procedural Order No. 6, issued on January 27, 2017, the OEB ordered OPG to file additional evidence on the status of the segregated funds and the interaction to date between amounts recovered and the fund status. OPG filed Exh C2-1-2, Nuclear Waste Management and Decommissioning – Supplementary Information, on February 14, 2017. The supplementary information states:

> As at December 31, 2016, the Decommissioning Segregated Fund ("DF") was overfunded at approximately 121% and the Used Fuel Segregated Fund ("UFF") was marginally overfunded at less than 1%, relative to the corresponding funding obligations per the 2017 ONFA Reference Plan. As reflected in Ex. N1-1-1, OPG expects this to result in overall zero required contributions to both funds until the next ONFA reference plan is approved.

Submissions on Methodologies

The parties generally refer to the current approved recovery methodologies as accounting based methodologies. CCC, CME,[119] LPMA and SEC submitted that the nuclear liability revenue requirement methodology should be calculated on a cash basis, i.e. representing the sum of the ONFA contribution requirements and the annual cash expenditures for internally funded nuclear liability programs. Implementation of this submission would reduce test period revenue requirement by $423.2 million.[120] CME submitted that this amount is not needed to fund present nuclear liabilities and is not necessarily going to be needed to fund future nuclear liabilities. SEC argued that as OPG does not have to make any contributions to the segregated funds, these payments could be used as general funds. The intervenors also argued that $108 million has been over-collected for the period from April 1, 2008 (the effective date of the OEB's first payment amounts order) to December 31, 2016 due to the historical variance of accounting versus cash amounts.[121] SEC and CME also raised concerns about tax impacts and inconsistent tax treatment.

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[119] CME's submission refers to a $314 million reduction.
[120] Undertaking J21.2, Chart 1, line 11 – revenue requirement reflecting approved contribution schedule: $1,503.3 million.
Undertaking J20.8, Chart 1, lines 6 and 14 – amounts forecast to be expended: $1,155.2 million-$75.1 million = $1,080.1 million.
Difference: $1,503.3 million-$1,080.1 million = $423.2 million.
[121] Undertaking J20.7.

OPG argued that the matters raised by the intervenors are not new. Nuclear liability revenue requirement methodologies were reviewed extensively in the EB-2007-0905 proceeding. OPG argued that the cash methodology was reviewed in the EB-2007-0905 proceeding, but not approved. OPG also argued in reply that the Decommissioning Fund has been in an overfunded position for the entire period of the OEB's payment amount jurisdiction, and that the EB-2007-0905 decision contemplated that the segregated funds would be fully funded in the future. With respect to the variance analysis that compares amounts collected in payment amounts to cash spent on nuclear liabilities, OPG submitted that the amounts collected in interim payment amounts set by the Province for the period April 1, 2005 to March 31, 2008 were $994 million lower than the amounts expended for nuclear liabilities.[122]

The EB-2007-0905 decision approved a GAAP-based methodology for Bruce as it is not rate-regulated. OPG submitted that maintaining a GAAP-based methodology for Bruce, but changing to a cash-based methodology for Pickering and Darlington would increase the revenue requirement by $634 million.[123]

CCC and CME submitted that there are no transition issues and that OPG would not be harmed should the OEB approve a change in methodology. OPG argued that there are many transition issues and compared them to the principles considered in the OEB's consultation on Pension and Other Post-Employment Benefits.[124]

There is a difference in the discount rate applied to determine the ARO for financial reporting purposes and the ONFA funding liability. SEC submitted that the liabilities on the OPG balance sheet are $2.2 billion too high (compared to the ONFA Funding Liability) due to this discount rate difference. OPG replied that the rates are different and serve different purposes, and that the difference has existed since EB-2007-0905. The ARO on OPG's balance sheet is determined in accordance with USGAAP and the ONFA Funding Liability is determined based on the ONFA Agreement.

OEB staff submitted that a study of nuclear liability revenue requirement methodologies and discount rates for ARO and ONFA funding liability could be filed in the next payment amounts proceeding. CME submitted that it is unjust to ask ratepayers to pay more than the cash amounts while the OEB is preparing to study the issues. OPG replied that it saw no need to undertake the study, but did not oppose the request.

[122] Undertaking J20.7.
[123] AIC pages 182 and 189.
[124] EB-2015-0040.

Findings

Nuclear Liability Revenue Requirement Methodology

CCC, CME, LPMA and SEC argue that the revenue requirement methodology should be changed from the current methodology (return on rate base for Pickering and Darlington, GAAP for Bruce) to a cash-based methodology. As there are no forecast contributions to the segregated funds in the test period per the 2017 ONFA Reference Plan, the current methodology results in revenue requirement that exceeds forecast nuclear liability cash expenses by $423.2 million.

In addressing this, the OEB considered that the nuclear liability revenue requirement methodology is a substantive matter involving a large expense that is considered over a timeframe that is measured in decades. A change to the nuclear liability revenue requirement methodology requires consideration of many factors – including accounting, funding and rate-making. This is not a simple task, as the following issues must be addressed:

- The ONFA is a bilateral agreement between OPG and the Province. OPG states that the ONFA funding requirements are not necessarily designed as a measure of OPG's costs or payments from ratepayers[125]
- O. Reg. 53/05 sets out certain requirements related to nuclear liabilities
- The current revenue requirement methodology for the regulated nuclear facilities differs from the methodology for Bruce
- The variance between amounts expended on nuclear liabilities and amounts recovered has been both positive and negative in the historical period
- The EB-2007-0905 decision observed that "there does not appear to be any consistent and generally accepted treatment of AROs and ARCs in other North American jurisdictions"[126]

The OEB finds that the evidence and testing of the evidence in this proceeding is insufficient to consider changing the revenue requirement methodology for nuclear liabilities at this time. The OEB understands the concerns that $423.2 million is forecast to be recovered in the test period that is in excess of forecast nuclear liability cash requirements. The OEB also observes that in the period 2009 to 2011, the amounts recovered for nuclear liabilities were considerably lower than requirements.[127] However,

[125] Reply Argument page 190.
[126] EB-2007-0905 Decision with Reasons, November 3, 2008, page 88.
[127] Undertaking J20.7 Chart 1.

on the basis of the evidence and argument in this proceeding, the OEB is not prepared to order a revision to the methodology established in the EB-2007-0905 proceeding.

Some parties made reference to aspects of the EB-2007-0905 decision in their argument which were not raised during the hearing. OPG noted that the submissions of some parties differ from submissions these parties made in EB-2007-0905.[128] The OEB also finds that the parties advocating a cash based methodology did not sufficiently explain why the cash based methodology is superior in the long term.

In addition to submitting that the revenue requirement methodology should not include amounts in excess of ONFA contributions and variable costs, CCC, CME and SEC also raised issues about tax implications. CCC submitted that the revenue requirement methodology is flawed because the tax consequences result in higher revenue requirement when the contributions to ONFA are lower. The OEB does not find this to be a compelling reason to change methodologies. The tax impacts are based on the application of tax rules.

OEB staff submitted that OPG should provide a jurisdictional study of cost recovery methodologies for nuclear liabilities with its next cost based nuclear payment amounts application. The OEB agrees that this study should be filed. The study should also include an examination of cost recovery for short term and long term nuclear liabilities as it relates specifically to OPG's assets.

The OEB also directs OPG to report annually by June 30 on expenses related to nuclear liabilities. The form of the reporting will be that set out in Chart 1 of undertaking J20.7. The expenses should separately identify ONFA expenses and internally funded expenses. The time period of the report should start at April 1, 2008 at the latest. The annual filings will assist parties with their preparation for future proceedings should they wish to advocate for a change to the current nuclear liability revenue requirement methodology.

Discount Rates

The ARO and ONFA funding liabilities are calculated using different discount rates which results in a difference in liabilities of $2.2 billion. CME and SEC submitted that OPG's ARO discount rate should be reduced to match the ONFA discount rate. OEB staff submitted that the matter could be reviewed as part of a comprehensive study of methodologies. OPG argued that that discount rates have been examined previously and noted in the EB-2007-0905 decision OPG submitted that historically the rates have

[128] Reply Argument, page 184-186.

varied and that in previous years the ONFA funding discount rate was lower than the ARO discount rate.[129]

The OEB acknowledges that the discount rates may be different at any given time and that they serve different purposes. If parties wish to examine the matter as part of the consideration of nuclear liabilities cost recovery methodology they may do so in a future proceeding.

Revenue Requirement

The OEB approves a test period nuclear liability revenue requirement of $1,503.3 million.

As explained above in section 5.12 regarding the Bruce Lease, the OEB agrees with the parties that the impact of the new ONFA Contribution Schedule and year end ARO adjustment should be reflected in the revenue requirement and not recorded in the Nuclear Liabilities Variance Account.

[129] Reply Argument page 186-187.

6 CAPITAL STRUCTURE AND COST OF CAPITAL

6.1 Capital Structure

OPG applied for a deemed capital structure of 49% equity and 51% debt. The equity thickness is an increase from the current 45% approved in the previous cost of service proceeding. In that proceeding, the OEB found that the addition of 48 hydroelectric facilities to those regulated by the OEB, and the completion of the $1.5 billion Niagara Tunnel Project, lowered OPG's business risk and that a reduction in equity thickness from 47% to 45% was appropriate.[130]

The following table summarizes the applied for and approved equity thicknesses in previous proceedings before the OEB.

Table 29: Equity Thickness

Equity Thickness	EB-2007-0905	EB-2010-0008	EB-2013-0321
Applied for	57.5%	47%	47%
Approved	47%	47%	45%

OPG stated that the proposed 49% equity thickness reflects the material increase in business and financial risks since the previous proceeding. OPG filed the evidence of Concentric Energy Advisors (Concentric) to support its application. Concentric testified that OPG's risk profile has changed and will continue to change over the test period. While the risks for the hydroelectric business are stable, there are significant risks related to the DRP and PEO for the nuclear business and both businesses face regulatory risk related to the implementation of incentive regulation and recovery risk related to deferred pension and OPEB costs. While the equity thickness for Concentric's comparator group ranged from 40.27% to 54.29%, Concentric concluded that OPG as a generation only company with a significant nuclear concentration has elevated risk. Concentric concluded that 49%, at a minimum, is an appropriate equity thickness for OPG.

OEB staff retained the Brattle Group (Brattle) as an independent expert to review Concentric's analysis and to evaluate OPG business risks. Brattle agreed that there is significant construction and execution risk related to DRP, but gave little weight to Concentric's concerns about OPG's ability to recover its costs associated with pension and OPEB. Brattle considered a different comparator group than Concentric; it included companies with significant generation that was subject to regulation. In addition, Brattle

[130] Decision with Reasons EB-2013-0321, November 20, 2014, pages 113-115.

analyzed OPG's credit metrics. Brattle concluded that it would be reasonable to increase equity thickness to 48%.

Most intervenors submitted that the equity thickness should remain at 45%, however VECC submitted that 40 to 45% was appropriate, and OEB staff submitted that 47% was appropriate.

As the 2017-2021 hydroelectric payment amounts will be set under an IRM regime, OPG proposed a new Hydroelectric Capital Structure Variance Account to record the hydroelectric revenue requirement impact of the difference between the capital structure approved in this proceeding and the 45% equity thickness that underpins the hydroelectric payment amounts.

Findings

The OEB finds that OPG has not established that there is a change in business risk that warrants an increase in the level of equity to 49%. The equity level will remain at 45%.

The OEB makes this finding based on the evidence regarding OPG's specific circumstances and the financial risks the OEB considers are actually faced by OPG, and a consideration of the level of equity that is appropriate for a Canadian utility to meet the fair return standard.

The Expert Evidence

Prior to giving evidence each of the experts was qualified and accepted as an expert by the hearing panel. All parties had an opportunity to raise any issues they might have regarding their expertise or independence. No issues of independence were raised by any party at that time. However, in final argument, at a stage in the proceedings when the experts could not respond, some intervenors suggested the experts lacked independence because they are typically retained by utilities. This is a serious allegation because an expert's independence is an essential element of his or her reputation.

It is also inappropriate at the argument stage of a proceeding. There is no basis for such an allegation in this case. Any party who intends to challenge the independence or other aspects of an expert witness's qualifications must do so before he or she is qualified to give expert evidence.

The OEB found both experts who testified on equity thickness to be forthright and helpful to the OEB's understanding of the issue.

Issues Raised by the Experts

The main factors underlying the experts' recommendation that the equity thickness be increased were:

1. The change in OPG's portfolio between hydroelectric and nuclear generation due to DRP capital investments
2. Consideration of OPG's cost recovery risk due to existing protections provided by O. Reg. 53/05 and established deferral and variance accounts
3. The move to IRM from cost of service regulation for hydroelectric payments
4. Capital expenditures related to the DRP
5. Pickering extended operations
6. Revenue deferred under rate smoothing
7. Recovery risk associated with pension and OPEB costs
8. Credit risk
9. OPG's equity ratio in comparison to other utilities selected by each expert

The change in OPG's portfolio between hydroelectric and nuclear generation due to DRP capital investments

The OEB does not accept OPG's argument that because the equity ratio was reduced to 45% due to the increase in hydroelectric generation in the last rates case, the spending on the DRP and PEO over the next few years must necessarily mean the equity ratio must be increased. There is more to it than that.

The EB-2013-0321 decision deals with more than one aspect of the impact of the increase in the hydroelectric generation portfolio. The two factors were the increase in annual MWh generated by hydroelectric with the addition of 48 previously unregulated facilities to the regulated portfolio and the completion of the Niagara Tunnel, and the increase in hydroelectric rate base by the addition of these assets to the regulated portfolio. The OEB found, in that case, that there was less risk as hydroelectric is more stable, from a revenue perspective, than nuclear generation. This is in part due to the

nature of the assets, and protections such as the Hydroelectric Water Conditions Variance Account required by O. Reg. 53/05.

In this case, while the nuclear rate base will increase substantially over the five-year term, the MWh generated by nuclear will not increase, and in fact will decrease at times as units are taken out of service at Darlington. The relative contributions of revenue from hydroelectric and nuclear will not change in favour of nuclear, so it is not axiomatic that the equity thickness should be increased on this basis.

Consideration of OPG's cost recovery risk due to existing protections provided by O. Reg. 53/05 and established deferral and variance accounts

The OEB accepts the opinions of both experts that, in general, there are more business risks associated with nuclear generation than with hydroelectric. However, in OPG's specific circumstances, there are a number of factors that substantially mitigate that risk. These include the various protections provided by O. Reg. 53/05 and the variance and deferral accounts that allow OPG the opportunity to recover substantially all their unexpected or unforeseen costs. These include:

Table 30: Nuclear Deferral and Variance Accounts[131]

Deferral and Variance Account	Established per
• Nuclear Liability Deferral Account	O. Reg. 53/05 section 5.2
• Nuclear Development Variance Account	O. Reg. 53/05 section 5.5
• Ancillary Services Net Revenues Variance Account – Nuclear sub-account	O. Reg. 53/05 section 5(1)(c)
• Capacity Refurbishment Variance Account – Capital Nuclear sub-account	O.Reg. 53/05 section 6(2)(4) – given eff ect by CRVA in Decision with Reasons EB-2007-0905
• Capacity Refurbishment Variance Account – Non-capital Nuclear sub-account	O. Reg. 53/05 section 6(2)(4) – given effect by CRVA in Decision with Reasons EB-2007-0905
• Bruce Lease Net Revenues Variance Account – Derivative sub-account	O. Reg. 53/05 section 6(2)(9) – given effect in Decision with Reasons EB-2007-0905 and Decision EB-2012-0002
• Bruce Lease Net Revenues Variance Account – Non-Derivative	O. Reg. 53/05 section 6(2)(9) – given effect in Decision with Reasons EB-2007-0905 and Decision EB-2012-0002
• Bruce Lease Net Revenues Variance Account – Non-Derivative Post 2012	O. Reg. 53/05 section 6(2)(9) – given effect in Decision with Reasons EB-2007-0905 and Decision EB-2012-0002
• Income and Other Taxes Variance Account – Nuclear sub-account	Decision with Reasons EB-2007-0905
• Pension and OPEB Cost Variance Account – Future Recovery – Nuclear sub-account	Decision and Order on Motion EB-2011-0090 and Decision EB-2012-0002
• Pension and OPEB Cost Variance Account – Post 2012 Recovery – Nuclear sub-account	Decision and Order on Motion EB-2011-0090 and Decision EB-2012-0002
• Pension and OPEB Cash versus Accrual Differential Deferral Account – Nuclear sub-account	Decisions with Reasons EB-2013-0321
• Pension and OPEB Cash Payment Variance Account – Nuclear sub-account	Decision with Reasons EB-2013-0321
• Pickering Life Extension Depreciation Variance Account	Decision EB-2012-0002
• Nuclear Deferral and Variance • Over/Under-Recovery Variance Account – Nuclear sub-account	Decision and Order EB-2009-0174
• Impact Resulting from Changes in Station End-of-Life Dates (December 31, 2015) Deferral Account	Decision and Order EB-2015-0374

[131] Exh H1-1-1.

OPG has also proposed some additional deferral and variance accounts in this proceeding which would also provide protection against variances between costs and recoveries; these are dealt with elsewhere in this Decision.

The move to IRM from cost of service regulation for hydroelectric payments

Concentric gave the move to IRM as one of the factors that would increase risk for OPG and therefore justify an increase in equity thickness.

In the previous OPG payment amounts decision (EB-2013-0321) the OEB expressly considered whether the move to IRM would increase risk to OPG and found that it did not. There is no new evidence in this case that the hydroelectric IRM will have any impact on risk. There are protections from forecast risk, with respect to costs and hydroelectric production, provided by the Hydroelectric Water Conditions Variance Account, and the CRVA for a significant amount of capital spending on hydroelectric. There are other mechanisms under a Price Cap IR plan such as those approved by the OEB in this Decision including Z-factors and ICMs, as proposed by OPG and available to it under the policies established in the Handbook for Utility Rate Applications (the Rate Handbook) issued after the application was filed. Given these protections, the OEB does not consider the move to IRM to pose much uncertainty for OPG.

The OEB has not changed the capital structure of any of the gas or electric utilities it regulates when they have moved to IRM. The expert witnesses agreed that they were unaware of any increase in risk to, or difficulty accessing capital by, these utilities after moving to IRM.

Capital Expenditures Related to the DRP

There is no question that successful execution of the DRP is a challenge for OPG during the term of this plan. The OEB accepts OPG's argument and the expert evidence that the impact of capital spending is prospective as it must be financed. The question here is whether the risks posed by the DRP alone justify an increase in the equity thickness.

The experts acknowledged that to date, there is no evidence that OPG has had any difficulty accessing the capital required for this project.

As noted in the section of this Decision on the DRP, OPG's evidence is that it has undertaken an exceptional level of planning for this project in order to reduce the risks.

More importantly, the risk posed by the DRP must be assessed in the context of the regulatory environment that applies to OPG. The types of risks faced by other regulated entities, such as gas utilities, when embarking on major capital projects do not apply to

OPG. O. Reg. 53/05 provides that the OEB must accept the "need" for the DRP, so there is no risk that the OEB will find in some later proceeding that it was not required and refuse to allow it to be added to rate base. This regulation also provides that OPG will recover its DRP costs not already in payment amounts through the CRVA, so long as they are prudent, even if the units are never returned to service. This is a protection not provided to other utilities the OEB regulates.

The OEB finds that given the planning, the approval of the spending in this proceeding and the regulatory protections afforded OPG, the DRP does not materially increase OPG's business risk.

Pickering Extended Operations

Concentric suggests that there are risks associated with Pickering Extended Operations, such as a determination that it may not proceed, and the risk of recovery of expenditures incurred in that event. Given the OEB's decision in this case regarding PEO, these risks are unlikely to materialize. PEO also enjoys many of the same protections as the DRP. PEO enabling expenditures have been approved in this proceeding, and any variances will be recovered through the CRVA.

Revenue deferred under rate smoothing

Rate smoothing is required by O. Reg. 53/05. The OEB finds there is no real risk, as suggested by OPG's cost of capital witness, that having implemented a rate smoothing plan required by regulation, the OEB would not allow OPG to recover the deferred rates.[132]

OPG and Concentric argued that risk is also increased due to the impact on OPG's cash flow. However, the OEB notes that OPG has not identified any concerns with it being able to obtain necessary financing for DRP and other operations, nor has it forecasted increased debt costs for capital financing over the period. OPG and the markets are aware of the risks, but are also aware of the protections provided through regulation and through the OEB's rate-regulatory mechanisms, such as deferral and variance accounts.

In the OEB's view, the rate smoothing that will ultimately be approved will provide adequate recoveries for OPG to manage its cash flow and other credit metrics during the five-year plan term, and that OPG and its lenders are aware of and are compensated with respect to deferred revenue which will, subject to prudence review,

[132] Exh C1-1-1 Attachment 1 page 28.

be recoverable in the long run due to the protections afforded by O. Reg. 53/05 and established deferral and variance accounts.

Recovery risk associated with pension and OPEB costs

Pension and OPEB costs are dealt with elsewhere in this Decision. In terms of increasing risk to OPG, the variance account required by the OEB in the previous payment amounts proceeding to track the differences in accounting treatment was established as a placeholder pending the outcome of the OEB's consultation on Pension and OPEB Costs (EB-2015-0040) and, specifically, the application of the eventual policy outcome to OPG. In its report resulting from the EB-2015-0040 consultation, the OEB determined that the accrual accounting method will be the default method on which to set rates for pension and OPEB amounts in cost-based applications, unless that method does not result in just and reasonable rates in the circumstances of any given utility. The report also established the use of a variance account to track the difference between the forecast accrual amount in rates and actual cash payments made, with asymmetric carrying charges in favour of ratepayers applied to the differential. The OEB may make a decision on whether this policy will apply to OPG when OPG proposes disposition of its related variance account. To the extent that there is a risk to OPG that the OEB may find differently for OPG (i.e. that the cash method shall apply), one potential negative outcome that OPG has claimed is that it would be forced to take a significant write-off related to these costs. This matter was not specifically tested in this proceeding and so the OEB has placed little weight on any recovery risk associated with pension and OEPBs.

Further, the OEB notes that parties, including OPG, acknowledged the OEB's policy on the regulatory treatment of pension and OPEB cost recovery in their submissions. SEC's argument notes that, while OPG's cost of capital expert witnesses from Concentric took the position that OPG's risk was increased relative to EB-2013-0321, the impact was immaterial.[133] In its reply argument, OPG notes that: "As noted by OPG in its EB-2015-0040 submission, continued recognition of the amounts recorded in the Pension & OPEB Cash Versus Accrual Differential Deferral Account is dependent on OPG beginning to recover those amounts within five years from the time that they were incurred. For example, amounts recorded during November 2014 must begin to be recovered no later than November 2019 and must be fully recovered within 20 years of November 2014. Failing this, OPG will be required to write off the regulatory asset for these amounts. As such, OPG will be required to file an application to review the

[133] SEC submission page 16.

disposition of the Pension & OPEB Cash Versus Accrual Differential Deferral Account in short order."[134]

The OEB is satisfied that this matter can and will be addressable in a timely manner, and hence that the risks identified by OPG and Concentric do not materially support any increase in risk or equity thickness.

Credit risk

The OEB finds that credit risk is not an independent factor in assessing whether business risk has changed – it is the credit rating agencies' assessment of those risks as to how they may affect solvency and liquidity. A downgrade in credit rating increases the cost of borrowing and may reduce or prevent access to some capital markets.

Both experts agreed that the credit rating agencies would take account of the regulatory protections enjoyed by OPG, as well as the Province of Ontario's ownership in assessing the risk of a project such as the DRP and how it affects OPG's overall credit risk.

Further, based on OPG's history since its incorporation, the credit rating agencies have not made material changes to OPG's credit ratings, with the one downgrade being linked to a downgrade in the Province's credit rating. So far, the credit rating agencies have not altered OPG's rating as a result of the DRP, PEO or any of the other potential risks identified by the witnesses.

OPG's equity ratio in comparison to other utilities selected by each expert

Each of the experts used a comparator group to determine the range of equity thickness that would be appropriate for OPG and to determine where OPG should be in that range.

The OEB accepts that the fair return standard requires that similar utilities be comparable in terms of equity thickness as well as return on equity. However, the jurisdiction in which utilities operate and are regulated is also a factor that must be considered.

While the experts used different comparator groups, both relied heavily on U.S. companies, as there are very few companies in Canada similar to OPG. Concentric included two Canadian utilities, Fortis and Emera, in its comparator group of 20 utilities. The range of equity ratios was 40.27% to 53.94%, the average was 49.06%, and the

[134] Reply Argument page 214.

median was 49.95%. They compared this to OPG at 45% and found that it should at least move to the median of the range. The two Canadian utilities had the lowest equity ratios at 40.27% and 43.31%.

Concentric's report includes a discussion of the fair return standard but focusses mostly on the cost of capital and return on investment rather than equity ratios. Appendix A to the report is a discussion of precedent for Canadian regulators using U.S. data. This discussion deals mostly with ROE, although the British Columbia Utilities Commission appears to have accepted that U.S. natural gas distribution companies have the potential to act as a useful proxy on capital structure in the Terasen Gas (Whistler) Inc. decision (Decision G-158-09). However, a bulletin published by Concentric on May 1, 2015 (Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities)[135] shows the range common equity ratios for utilities in the U.S. and Canada. This bulletin observes that the allowed ROE in the U.S. and Canadian have converged, but this is not true for common equity ratios as can be seen below:

Table 31: Authorized Common Equity Thicknesses for Canadian and U.S. Gas and Electricity Utilities (2015)

Common Equity Ratio (%)	Canada Range	Canada Average	US Average
Gas	30 – 46.5	40	50.6
Electricity Distributors	25 – 45	38.53	51.81

The report also observes that allowed equity ratios for Canadian electricity transmission companies are 14% lower than their U.S. counterparts.

Brattle used a different approach, separating out investor owned utilities with nuclear generation, the Tennessee Valley Authority which has some nuclear and some hydroelectric generation, and companies with only hydroelectric generation. The only Canadian company on the list is BC Hydro, which has no nuclear. Rather than regulated common equity ratios, Brattle used Book Value Equity Capitalization. The mean and median for the seven investor owned companies with nuclear generation was 47.8%

[135] Exh K18.4 pages 28-31.

and 47.4% respectively. There is no substantive discussion of the different equity ratios for Canadian utilities.

The OEB finds that an adjustment to the comparator group data should have been made by both experts to account for the substantially lower common equity ratios allowed regulated utilities in Canada. While the OEB will not impose a level that is 10% lower than comparable U.S. utilities, at 45%, OPG is already at the top end of the range for all the Canadian utilities for which data was presented, and less than 10% lower than any of the U.S. utilities surveyed.

The OEB considers that based on the evidence in this case, and in combination with all of the cost of capital parameters, and consideration of all of the rate-setting provisions and conditions established previously or approved in this Decision, that on balance an increase in OPG's equity thickness is not necessary in order for the fair return standard to be met.

As the OEB has found that no change in equity thickness is required, the proposed Hydroelectric Capital Structure Variance Account is not required.

6.2 Return on Equity

The application, as originally filed, reflected an ROE of 9.19%, but proposed that for 2017, the ROE would be set using the prevailing ROE specified by the OEB in accordance with the OEB's Cost of Capital Report. The ROE for 2017 was subsequently updated to 8.78% in accordance with the parameters published by the OEB on October 27, 2016. The 2017 ROE of 8.78% was reflected in the impact statement filed by OPG on December 20, 2016.[136] For the years 2018 to 2021 OPG proposed that the OEB specified rate would also apply, but that the revenue requirement impact of any change in ROE would be recorded in a new Nuclear ROE Variance Account.

This application seeks hydroelectric payment amounts set under IRM. OPG did not propose to update the ROE for the regulated hydroelectric facilities.

While OPG's proposed Nuclear ROE Variance Account is inconsistent with the Rate Handbook, OEB staff did not oppose the new account as the application was filed prior to the issuance of the Rate Handbook. CCC, LPMA and SEC also argued that the proposal is inconsistent with the Rate Handbook. SEC further argued that OPG's proposal was contrary to O. Reg. 53/05. The requirement to set revenue requirement on

[136] Exh N1-1-1.

a five-year basis is a clear indication that the OEB should avoid approving deferral and variance accounts to track differences in parts of the revenue requirement. OPG argued that the setting of nuclear revenue requirement on a five-year basis must be interpreted in the context of the regulation as a whole.

Findings

OPG has filed a five-year Custom IR application for nuclear payment amounts. The Custom IR term, and the concept, were first espoused by the OEB in the RRFE Report, applicable to electricity distributors. The Custom IR plan was designed to accommodate individual utilities whose circumstances, particularly with respect to operating and capital needs to serve energy users over a multi-year term were not sufficiently stable and predictable that rate adjustment under an annual inflation-less-productivity formula would be adequate.

With the Rate Handbook issued on October 13, 2016, the various rate-setting options, including Custom IR, were extended to all rate-regulated utilities in Ontario.

As noted in section 8.2 of this Decision, the OEB concurs that OPG's proposed plan for nuclear generation assets fits the Custom IR description. Further, while OPG's application was filed prior to the issuance of the Rate Handbook, the OEB finds that OPG's multi-year proposal largely complies with the policies and expectations for a Custom IR plan as enunciated in the Rate Handbook.

Some utilities in both the natural gas and electricity sectors have proposed multi-year plans to accommodate their individual circumstances over the past decade. The OEB's experiences and decisions on such applications have informed the OEB on its Renewed Regulatory Framework and are reflected in the Rate Handbook issued in 2016. In the Rate Handbook, the OEB stated "Custom IR is not a multi-year cost of service; explicit financial incentives for continuous improvement and cost control targets must be included in the application. These incentive elements, including a productivity factor, must be incorporated through a custom index or an explicit revenue reduction over the term of the plan (not built into the cost forecast)."[137] The OEB went on to state:

- Updates: After the rates are set as part of the Custom IR application, the OEB expects there to be no further rate applications for annual updates within the five-year term, unless there are exceptional circumstances, with the exception of the clearance of established deferral and variance accounts. **For example, the OEB does not expect to address annual rate applications for updates for cost of capital**, working capital allowance or sales volumes. In addition, the

[137] Handbook for Utility Rate Applications page 25.

> establishment of new deferral or variance accounts should be minimized as part of the Custom IR application.[138] [Emphasis added.]

OPG has not proposed annual rate applications, except for the mid-term review (addressed elsewhere in this Decision). However, the OEB considers the proposed Nuclear ROE Variance Account to be analogous to an annual cost of capital update, and thus inconsistent with the OEB's intentions in the Rate Handbook. Accordingly, the OEB does not approve this proposed variance account.

As noted above, the OEB is disallowing the proposed change in equity thickness. As a result, the OEB is not approving the proposed Hydroelectric Capital Structure Variance Account, and finds that consideration of submissions on the Hydroelectric ROE is not necessary.

6.3 Long-term and Short-term Debt

OPG seeks to recover the costs of long-term and short-term debt associated with its regulated operations during the IR term. The parties to the settlement agreed that the interest rates used to calculate OPG's proposed debt costs were appropriate. Those rates are:

Table 32: Long-Term and Short-Term Debt Rates

	2017	2018	2019	2020	2021
Long-Term Debt	4.89%	4.60%	4.52%	4.49%	4.48%
Short-Term Debt	1.41%	2.73%	3.75%	3.80%	3.65%

Source: Exh C1-1-1, Tables 1-5

While there was agreement on the debt rates, issue 3.2 was only partially settled as the costs for debt components of the capital structure would depend on the OEB's final determination on capital structure and rate base.

Findings

The OEB accepted the settlement proposal with respect to long- and short-term debt rates.

[138] Handbook for Utility Rate Applications page 26.

In argument, LPMA raised an issue about the composition of the debt between short term and long term. OPG's proposal is to maintain a constant amount of short term debt though 2021 ($37.1 million). LPMA argued that the proportions of short and long term debt should be constant, which would result in a larger amount of short term debt as the overall debt increases during the five-year term of the plan.

The OEB agrees with OPG that there is no reason to adjust the level of short term debt. First, the issue was settled by the parties, including LPMA, so there was no discussion of it at the oral portion of the hearing. Argument is not the appropriate time to raise an issue about a matter that appears to be settled. Secondly, the OEB agrees with OPG that there is sufficient evidence on the record to explain the change in the relative proportions of short and long term debt. The level of short term debt is not increasing. The portion of debt that is long term is increasing substantially due to the DRP. The substantial increase in long term debt for the DRP does not impact the need for short term debt for OPG's business operations. There is no reason to require OPG to partially fund the DRP or other capital projects through short- rather than long-term debt solely for the purpose of maintaining a constant ratio that is not aligned with OPG's debt financing requirements during this five-year period, and which is likely to continue beyond 2021.

The final approved debt costs will be adjusted by the rate base and capital structure findings found elsewhere in this Decision.

7 DEFERRAL AND VARIANCE ACCOUNTS

OPG proposed to recover the audited December 31, 2015 balances in deferral and variance accounts, less the 2016 amortization amounts approved in EB-2014-0370, except for the Pension & OPEB Cash Versus Accrual Differential Account and the amounts approved for future recovery in the Pension & OPEB Variance Account in EB-2012-0002 and EB-2014-0370. OPG proposed clearance in riders over two years of $86.8 million for the regulated hydroelectric facilities and $217.9 million for the nuclear facilities. Many of the issues related to deferral and variance accounts were either fully settled or partially settled.

7.1 Additions to Accounts

Issue 9.1 (Is the nature or type of costs recorded in the deferral and variance accounts appropriate?) was partially settled. The nature or type of costs recorded in the CRVA (nuclear), Nuclear Liability Deferral Account and Bruce Lease Net Revenues Variance Account were not settled. There were no submissions filed on this issue in relation to these accounts.

As noted in section 5.11 regarding taxes, OEB staff submitted that variances between forecast and actual SR&ED ITCs could be recorded in the existing Income and Other Tax Variance Account. OPG replied that using this account would be inconsistent with the OEB approved settlement agreement and with the intent of the Income and Other Tax Variance Account. The account was originally established in the EB-2007-0905 decision to record variances due to changes in tax rates or rules, new assessing or administrative practices of tax authorities, and tax re-assessments for past periods. However, OPG did not object to prospectively truing up nuclear SR&ED ITCs using a new SR&ED ITC variance account.

The nature and type of costs recorded in the CRVA (nuclear), Nuclear Liability Deferral Account, Bruce Lease Net Revenues Variance Account and Income and Other Tax Variance Account will be as described in the application. A new SR&ED ITC Variance Account has been approved by the OEB in section 5.11 of this Decision.

Issue 9.2 (Are the methodologies for recording costs in the deferral and variance accounts appropriate?) was partially settled. Similar to issue 9.1, the methodologies for recording costs in the CRVA (nuclear), Nuclear Liability Deferral Account and Bruce Lease Net Revenues Variance Account were not settled. Submissions on the operation of the CRVA were filed by OEB staff, CCC, LPMA and SEC. No submissions were filed on this issue for the other two accounts.

While not identified in the settlement proposal, the methodology for recording costs in the hydroelectric CRVA sub-account was also reviewed in this proceeding. OPG's proposal regarding methodology for recording costs was set out in the application and additional evidence at Exh H1-1-2. Under OPG's proposal, there will be no additions to the CRVA until depreciation escalated by (I – X) is exceeded. The CRVA eligible additions would then be compared with the $0.9 million CRVA amount underpinning current payment amounts. SEC submitted that the threshold should include ROE and cost of debt as well as depreciation. OEB staff submitted that the $0.9 million reference amount should be escalated by (I – X). OPG argued that ROE and cost of debt are not available to fund replacement or new investment, and that there are no prior decisions that require threshold amounts to be escalated by a price cap or (I – X).

Both OEB staff and CCC submitted that additions to the nuclear CRVA sub-account should only occur in circumstances where non-CRVA in-service amounts are not under-spent. OPG disagreed as the Custom IR application, unlike the Hydroelectric IRM application, is underpinned by a five-year capital plan. The specific projects that will be subject to CRVA treatment, e.g. DRP and PEO, are clearly identified and there were no submissions objecting to these CRVA eligible projects. The nuclear CRVA operation in this Custom IR application is no different than that in previous cost of service applications.

The methodologies for recording costs in the Nuclear Liability Deferral Account and Bruce Lease Net Revenues Variance Account will be as described in the application.

As noted in section 8.1 of this Decision, Hydroelectric Payment Amount Setting, the OEB agrees with OPG that SEC's inclusion of the cost of debt, ROE and payments in lieu of taxes (PILs) as "Capital Built into Base Rates" is incorrect. The OEB finds $0.9 million of the CRVA amount underpinning current payment amounts should be adjusted by the hydroelectric IRM inflation less productivity factor (I – X).

As noted in section 5.2 of this Decision, Nuclear Capital Expenditure and Rate Base, the OEB finds that the operation of the nuclear sub-account of the CRVA will continue as proposed by OPG.

7.2 Balances in Accounts and Disposition

Issue 9.3 (Are the balances for recovery in each of the deferral and variance accounts appropriate?) was partially settled. OPG has proposed to recover its audited December 31, 2015 deferral and variance account balances, less certain 2016 amortization amounts. The balances for recovery in the CRVA (nuclear), Nuclear Liability Deferral

Account, Bruce Lease Net Revenues Variance Account and the Pension & OPEB Cash Versus Accrual Differential Deferral Account were not settled. There was only one submission on this matter. OEB staff submitted that the amounts recorded in the Pension & OPEB Cash Versus Accrual Differential Deferral Account and the Pension & OPEB Cash Payment Variance Account will need to be reviewed at the time they are requested for disposition. In reply, OPG argued that the amounts are not subject to prudence review, referring to the EB-2013-0321 decision which states that the differences are not set aside for a future prudence review.

The balances for recovery in the CRVA (nuclear), Nuclear Liability Deferral Account and Bruce Lease Net Revenues Variance Account will be as described in the application.

The OEB finds that since the disposition of the balance in the Pension & OPEB Cash Versus Accrual Differential Deferral Account has not been requested as part of this application, the matter of the scope of the review will be deferred to a future application and addressed at the time disposition of the balance is requested. The OEB also notes that the final Report of the OEB on the Regulatory Treatment of Pension and OPEB Costs (EB-2015-0040) has been issued and expects OPG to address the applicability of the outcomes of the Report to OPG.

Issue 9.4 (Are the proposed disposition amounts appropriate?) was not settled. With the exception of the Pension & OPEB Cash Versus Accrual Differential Account, OPG proposed recovery of the audited December 31, 2015 balances in deferral and variance accounts, less amortization amounts approved in EB-2012-0002 and EB-2014-0370.[139]

The proposed disposition amounts for this proceeding are $86.8 million for regulated hydroelectric facilities and $217.9 million for nuclear facilities. No submissions were filed on this matter.

The OEB approves the disposition of $86.8 million from regulated hydroelectric deferral and variance accounts and $217.9 million from nuclear deferral and variance accounts as proposed by OPG.

Issue 9.5 (Is the disposition methodology appropriate?) was not settled. As in previous proceedings, OPG proposed separate hydroelectric and nuclear payment amount riders. OPG proposed disposition of the amounts noted above over a two-year period commencing January 1, 2017. The production basis for the hydroelectric payment amount rider would be the 2015 actual regulated hydroelectric output. The production

[139] The EB-2012-0002 decision approved a 12-year amortization of the Pension and OPEB Cost Variance Account (Future) and the EB-2014-0370 decision approved a six-year amortization of the Pension and OPEB Cost Variance Account (Post 2012 Additions).

basis for the nuclear payment amount rider would be the proposed 2017-2018 forecast nuclear output.

OEB staff, in its submission on rate smoothing, submitted that the OEB could consider different disposition weightings to smooth payment amounts, e.g. 60% in one year and 40% in the next year. OEB staff also submitted that the OEB could consider riders that are effective on a date other than January 1, 2017, e.g. July 1, 2017.

The OEB is ordering an effective date of June 1, 2017 for the base payment amounts as noted in section 12 of this Decision. OPG shall file a draft payment amounts order reflecting deferral and variance account disposition and a proposal for the recovery period as noted in section 11 of this Decision.

OPG's draft payment amounts order shall include a weighted average payment amount smoothing proposal that includes the deferral and variance account riders.

7.3 Continuation of Accounts and New Accounts

Issue 9.6 (Is the proposed continuation of deferral and variance accounts appropriate?) was settled. The parties agreed to OPG's proposal to continue the accounts described in Exh H1-1-1.

Issue 9.7 (Is the rate smoothing deferral account in respect of the nuclear facilities that OPG proposes to establish consistent with O. Reg. 53/05 and appropriate?) was not settled. In accordance with section 5.5 of O. Reg. 53/05, the Rate Smoothing Deferral Account (RSDA) will be established effective January 1, 2017. The RSDA will record the difference between (1) the total annual nuclear revenue requirement approved by the OEB and (2) the revenue requirement that is used to set the approved nuclear payment amounts in each year.

The deferred amounts will be recorded in the RSDA from January 1, 2017 until the end of DRP. O. Reg. 53/05 stipulates that the account shall record interest at OPG's long term debt rate, compounded. O. Reg. 53/05 requires recovery on a straight line basis at the end of DRP over a period of 10 years or less. Submissions were filed on rate smoothing, but not on establishing the RSDA or its consistency with the regulation.

Both OEB staff and CCC made submissions regarding the CRVA (low interest rate, simple interest) and RSDA (long-term debt rate, compounded interest) operation. OEB staff's submission includes several suggested reductions to OPG's DRP proposal. OEB staff noted that any variances would be tracked in the CRVA and prudent costs

dispositioned after 2021. OPG argued that the recovery of these variances would place added pressure on rate smoothing in the 2022 to 2026 period.

CCC observed that, depending on the OEB's decision, there could be significant RSDA additions at the same time that there are credit amounts in the CRVA. CCC submitted that credits to the CRVA should be tracked in the RSDA. OPG disagreed, stating that the time frame considerations for the accounts have required different carrying cost considerations.

The OEB approves the RSDA as set out in section 5.5 of O. Reg. 53/05, and as proposed by OPG. The effective date for the account is January 1, 2017.

The OEB's findings with respect to nuclear operations capital and rate base are in section 5.2 and with respect to OPG's DRP proposal are in section 5.3 of this Decision. The OEB has approved OPG's DRP proposal. The OEB has reviewed CCC's submission and finds that the proposal to track credits to the CRVA in the RSDA is outside the scope and definition of the RSDA as set out in O. Reg. 53/05.

The entries in the CRVA are subject to prudence review on disposition. The entries in the RSDA track previously approved costs for recovery at a later date. The balances in the RSDA are reviewed only for compliance with the terms of the account. There is no prudence review of the spending itself.

Issue 9.8 (Should any newly proposed deferral and variance accounts be approved by the OEB?) was not settled. In its application, OPG proposed four new deferral and variance accounts:

- Rate Smoothing Deferral Account
- Mid-term Nuclear Production Variance Account
- Nuclear ROE Variance Account
- Hydroelectric Capital Structure Variance Account

The RSDA is discussed above. Submissions were filed objecting to the other three accounts. In a general submission on new accounts, OEB staff submitted that OPG should provide a draft accounting order for each new account during the payment amount order process. OPG replied that the information contained in an accounting order has already been provided, but would provide accounting orders if so directed.

The OEB has not approved a mid-term review for production forecast (section 9 of this Decision) and therefore a Mid-term Nuclear Production Variance Account is not required.

In the Capital Structure and Cost of Capital section of this Decision, section 6, the OEB did not approve the Nuclear ROE Variance Account. As the OEB is not approving a change to equity thickness, there is no need to consider the Hydroelectric Capital Structure Variance Account

Although not initially proposed by OPG in its application, the following new deferral and variance accounts have been approved in this proceeding:

- Fitness for Duty Deferral Account (section 5.6 of this Decision)
- SR&ED ITC Variance Account (section 5.11 of this Decision)

The OEB agrees with OEB staff that a draft accounting order should be provided for each new account, i.e. RSDA, Fitness for Duty Variance Account and SR&ED ITC Variance Account, during the payment amount order process.

7.4 Future Deferral and Variance Account Disposition

OPG proposed to file a mid-term production review application in the first quarter of 2019, that would include a request to dispose of applicable audited 2018 year end deferral and variance account balances.

LPMA submitted that OPG should dispose of deferral and variance account balances annually. This would reduce the potential for large balances and minimize intergenerational inequity. LPMA noted that annual disposition would be consistent with the five year IRM plans of Union Gas and Enbridge Gas Distribution.

On May 18, 2017, the OEB issued its EB-2015-0040 report on *Regulatory Treatment of Pension and Other Post-Employment Benefits (OPEBs) Costs.* The report established the accrual method as the default rate-setting method to recover approved pension and OPEB costs subject to the OEB finding in any particular case that it leads to just and reasonable rates. In its submission, OEB staff submitted that there are implementation matters regarding disposition of deferral and variance accounts and the consideration of the transition to accrual. In its reply argument, OPG submitted that it would be appropriate to clear the Pension & OPEB Cash Versus Accrual Differential Deferral Account at the same time as its application for 2018 hydroelectric payment amounts. OPG repeated its submission from the EB-2015-0040 proceeding which noted that under the requirements of USGAAP, the period of deferring amounts recorded in the Pension & OPEB Cash Versus Accrual Differential Deferral Account must not exceed five years from the time that they were incurred. For example, amounts recorded during November 2014 must begin to be recovered no later than November 2019 and must be

fully recovered within 20 years of November 2014. Failing this, OPG will be required to write off the regulatory asset for these amounts. As such, OPG will be required to file an application to review the disposition of the Pension & OPEB Cash Versus Accrual Differential Deferral Account in short order.

The OEB has not approved a mid-term review for production forecast. OPG may file to dispose of applicable audited deferral and variance account balances at the same time as its application for 2019 hydroelectric payment amounts in calendar year 2018. OPG may include its proposal for review of the Pension & OPEB Cash Versus Accrual Differential Deferral Account.

8 METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

Section 6(1) of O. Reg. 53/05 provides that the OEB may establish the form, methodology, assumptions and calculations used in making an order that sets payment amounts. Since 2008, the payment amounts for the nuclear and regulated hydroelectric business have been set on a cost of service basis. However, the OEB indicated its intention to implement an incentive regulation formula for OPG prior to the first payment amount proceeding.[140] The 2011-2012 payment amount decision[141] concluded that incentive regulation for OPG should begin in 2015 and directed OPG to provide a work plan and status report for an independent productivity study with the next cost of service proceeding.

OEB staff commissioned Power Advisory LLC to prepare a report on incentive regulation options for OPG, and conducted a stakeholder consultation in 2012. Following the consultation, the OEB issued a report in 2013 under file EB-2012-0340 setting out the OEB's policy direction associated with implementing incentive regulation for OPG.[142] With the completion of the Niagara Tunnel Project, the regulated hydroelectric business would more closely resemble steady state. The OEB concluded that following completion of one further cost of service application, an IR mechanism should be used to set payment amounts for the regulated hydroelectric business. As large capital expenditure for the nuclear business was forecast along with reduced production forecast related to DRP and Pickering closure, the OEB concluded that a longer term cost based approach should be explored for the setting of nuclear payment amounts. These approaches were again confirmed by the OEB in the 2014-2015 payment amount decision.[143]

The OEB informed interested parties on February 17, 2015 that it would not establish working groups on incentive rate-setting (IR) mechanisms as OPG had already initiated stakeholder consultations. The OEB advised of its expectations of an IR framework for the regulated hydroelectric business and a custom IR framework for the nuclear business.

[140] Board Report, *A Regulatory Methodology for Setting Payment Amounts for the Prescribed Generation Assets of Ontario Power Generation Inc.,* EB-2006-0064, November 30, 2006.
[141] EB-2010-0008 March 10, 2011.
[142] Report of the Board, *Incentive Rate-making for Ontario Power Generation's Prescribed Generation Assets,* EB-2012-0340, March 28, 2013.
[143] EB-2013-0321 November 20, 2014.

8.1 Hydroelectric Payment Amount Setting

8.1.1 Application for Price Cap IR

OPG has proposed a price cap IR methodology for the regulated hydroelectric business that is similar to the price cap IR methodology used by electricity and gas distributors. This methodology was previously known as 4th generation IR.

$$\text{Payment Amount}(t) = \text{Payment Amount}(t\text{-}1) \times \left(1 + \text{Inflation Factor} - \left(\text{Productivity Factor} + \text{Stretch Factor} \right) \right)$$

OPG seeks approval of the payment amount setting formula for the five-year period 2017 to 2021. OPG also seeks approval for the regulated hydroelectric payment amount of $41.71/MWh effective January 1, 2017. The starting point for the payments amounts are those approved in EB-2013-0321. OPG proposed an inflation factor of 1.8% for 2017, a productivity factor of zero and a stretch factor of 0.3%, as well as other features of IR plans, e.g. Z-factor treatment for unforeseen events.

OPG proposes to file an application in the fall of each year to set the next year's payment amounts. Adjustments would be mechanistic and based on the determination of an updated inflation factor.

There were no submissions filed that opposed the overall price cap IR methodology. However, there were submissions on the inflation, productivity and stretch factors. The Society and PWU supported all aspects of OPG's application with respect to hydroelectric payment amounts. Sustainability-Journal submitted that OPG should make more use of available flow from the hydroelectric generation stations.

Findings

The OEB agrees with the overall approach of an annual mechanistic update as it accords with the approach used by electricity distributors and the *Handbook for Utility Rate Applications*.

Each of the factors is discussed further in the Decision below. As noted below, the OEB has already accepted the base payment amount of $41.09/MWh by approving the settlement proposal.

8.1.2 Base Hydroelectric Payment Amounts

OPG proposed to use the hydroelectric payment amounts approved in EB-2013-0321, adjusted for a tax allocation, as the going-in payment amounts for the IR term. The hydroelectric payment amounts include a one-time allocation of nuclear tax losses relating to the EB-2013-0321 proceeding. Parties to the settlement proposal agreed with the adjustment for the tax allocation and the resulting going-in hydroelectric payment amount of $41.09/MWh. This was accepted by the OEB on March 20, 2017.

8.1.3 Inflation Factor

Inflation Factor Components

OPG retained London Economics International LLC (LEI) to recommend an appropriate inflation factor. A composite index based on the following Statistics Canada indices was recommended:

- Canadian Gross Domestic Product Implicit Price Index – Final Domestic Demand (GDP-IPI FDD)
- Average Weekly Earnings for Ontario – Industrial Aggregate (Ontario AWE) Canada.

The OEB uses the same indices to determine the inflation factor for electricity distributors, and has done so since 2013. The weightings used for electricity distributors are 30% for labour and 70% for non-labour.[144] LEI determined that the appropriate weighting for the capital intensive hydroelectric generating industry is 81% for capital, 7% for non-labour OM&A and 12% for OM&A labour (i.e. 88% non-labour, 12% labour).

There were no submissions filed opposing the recommended indices or the recommended weightings, except for the submissions on the Gross Revenue Charge (see section below).

Findings

The OEB accepts the indices and weightings as proposed. The OEB's findings with respect to the Gross Revenue Charge are discussed below.

[144] Report of the Board on *Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors* (EB-2010-0379) November 21, 2013.

Inflation Factor Calculation

Through interrogatories and cross-examination, OEB staff reviewed OPG's calculation for its proposed inflation factor for 2017. OEB staff submitted that, consistent with the OEB's practice since 2013, the arithmetic approach to calculate annual growth rate should be replaced with the natural log function, and further that any rounding of data should not be done in intermediate step calculations. OEB staff noted that the change to the natural log function was not apparent in the documentation issued in 2013.

While OPG had calculated a 1.8% inflation factor for 2017, OEB staff submitted that the correct calculation method would result in an inflation factor of 1.7%. In reply argument, OPG accepted OEB staff's proposed methodology for calculating the I-factor.

Findings

The OEB agrees that the natural log function should be used to calculate the annual growth rate as it is consistent with OEB practice established since 2013. This approach and rounding of data as a final step will be used for 2017. The same methodology is to be used in future years.

Gross Revenue Charge

Several parties questioned whether the I-factor should apply to the Gross Revenue Charge (GRC) component of hydroelectric revenue requirement. As noted in Exh F1-4-1 of the EB-2013-0321 application, the forecast GRC for the regulated hydroelectric facilities was $328.9 million and $347.1 million in 2014 and 2015, respectively.

SEC argued that the I-factor should give 0% weighting to the GRC as it is a fixed charge based on production and does not vary with inflation, and this is not expected to change in the test period. SEC estimated the GRC to be 25% of hydroelectric revenue requirement.

While LEI testified that GRC was similar to PILs, SEC argued that PILs will increase with inflation as the revenues and expenses underpinning net income, on which PILs are applied, are expected to increase with inflation. SEC calculated a GRC adjusted inflation factor of 1.35% for 2017. OEB staff submitted that some portion of inflation-less costs is factored into GDP-IPI, and proposed that half of the GRC be considered as inflation-less, resulting in a GRC adjusted inflation factor of 1.5%. CCC and LPMA proposed Y-factor treatment for GRC.

OPG replied that the GRC is not meaningfully different from other taxes in revenue requirement. There is no principled basis on which to carve out the GRC.

Findings

The OEB has considered the SEC submission that the inflation factor should not apply to GRC, and the OEB staff submission that a portion of the GRC could be excluded from inflation treatment.

Section 92.1(4) of the *Electricity Act, 1998* provides that the GRC tax component is a percentage of gross revenue from annual generation. Section 92.1(5) also sets out the rates for the GRC water rental component as a percentage of gross revenue from annual generation. Accordingly, the entire GRC is determined on the basis of gross revenue from annual generation and not on production as submitted by SEC. Under IRM, the gross revenue which is underpinned by hydroelectric payment amounts will reflect some level of inflation, and therefore the tax and water rental components of the GRC will reflect similar levels of inflation as OPG's other costs and those of businesses in other sectors of the economy. This inflation in business costs is measured in macroeconomic price indices like the GDP-IPI.

The OEB finds that it is appropriate to apply the I – X factor to the GRC.

8.1.4 Productivity Factor

The OEB and the electricity distributors are experienced with the index method which converts outputs and inputs into an index value for the determination of industry total factor productivity (TFP). There is no precedent for TFP studies of the hydroelectric generation industry for the purposes of ratemaking.

As directed by the OEB in the 2011-2012 payment amounts decision, OPG contracted with LEI in 2013 to conduct an independent productivity study of the hydroelectric generation industry. The report summarizing that work was filed with the OEB on December 18, 2014. The report was subsequently updated and filed in this proceeding. Based on an analysis of OPG and 15 US peers using data from 2002-2014, LEI calculated an estimated annual TFP of -1.01%. LEI explained that a negative TFP should be expected for the mature hydroelectric generation industry as there is increasing OM&A, relatively constant capital and relatively stable output. In the application, OPG proposed a 0% productivity factor, noting that the OEB has declined to accept negative productivity for electricity distributors.

OEB staff retained Pacific Economics Group Research LLC (PEG) to review OPG's hydroelectric IRM proposal, LEI's TFP study, and to conduct an independent study.

PEG's analysis and its determination that a TFP of 0.29% is appropriate was filed as evidence in the proceeding.[145]

Representatives of both LEI and PEG appeared as expert witnesses at the oral hearing. OPG and the unions urged the OEB to accept LEI's analysis, while OEB staff and the other intervenors argued in favour of PEG's analysis.

The following table summarizes the TFP methodologies and results:

Table 33: LEI and PEG Productivity Factor Methodologies and Results

	LEI	PEG
Output	Generation (MWh)	Capacity (MW)
Inputs	Operating Cost	Operating Cost
	Capital Measure (MW – physical) No depreciation assumed	Capital Measure (monetary) depreciation based on geometric decay, return on rate base, taxes
Sample	US utilities and OPG (16 total)	US utilities (21 total)
Period	2002 to 2014	1996 to 2014
Total Factor Productivity	-1.01%	0.29%

LEI selected plant capacity as the capital input measure. Capacity data are readily available and consistently measured in the industry. Further, assuming proper maintenance, productive capacity does not generally depreciate or decline significantly over time. OPG's Reply Argument states that LEI's approach does not require the OEB to make any assumptions about depreciation of hydroelectric assets.

PEG chose geometric decay to model depreciation for the capital input measure based on monetary data of hydroelectric assets. Geometric decay is widely used in North America and has been used by PEG for most of the research it has completed in the past for the OEB. It is PEG's view that hydroelectric assets do not exhibit a constant flow of service throughout their lives.[146] There is a decline in the flow of service as measured by a continual stream of "refurbishment" capital to maintain productive capacity. Further, individual assets have components with different service lives.

[145] Exh M2.
[146] PEG response to LEI memorandum, February 16, 2017.

OPG argued that PEG's use of the geometric decay profile is primarily responsible for the positive TFP identified. OPG states that the use of geometric decay contradicts references cited by PEG, namely an Organization of Economic Cooperation and Development manual, which suggests that bridges and dams are examples of assets that show no (or little) functional depreciation until end-of-life.

Whether water availability was correctly or adequately reflected in the analysis was central to examination of and submissions on TFP output measures. OPG stated that generation is a superior output measure as this is how OPG is paid and hydroelectric and efficiency improvements generally increase generation. However, PEG and several parties observed that generation is sensitive to weather fluctuations and hydrology, and therefore choice of the sample period as well. While PEG selected capacity as the appropriate output measure citing its stable growth and the importance of MW as a cost driver, OPG argued that it would incent a utility to build excess capacity despite lacking water to use the capacity.

There were differing views on which methodology best reflected the impact of the Niagara Tunnel Project which cost $1.5 billion and increased generation by 1.5 TWh. LEI's methodology captures the increased MWh impact, while PEG's methodology captures the expense.

In reply argument, OPG stated that the matter before the OEB is not which TFP methodology to apply, rather the issue is whether OPG`s proposed 0% productivity factor is appropriate.

Findings

While there have been TFP based empirical studies for generation in academia, the LEI and PEG TFP studies are the first TFP studies for the hydroelectric generation business sector for the purposes of regulatory ratemaking.[147] The OEB is not prepared to completely accept the approach of either expert. As discussed extensively in responses to interrogatories, during the oral hearing, and in submissions, there are strengths and weaknesses of both approaches.

The OEB agrees with LEI that generation (MWh) is the most appropriate measure of output, as it is generation produced, and not capacity, which is the basis for revenues to recover capital and operating costs. However, the OEB also recognizes limitations with LEI's approach. The OEB questions LEI's physical approach which uses MW capacity as an input, as this measure does not take into account financial considerations, such

[147] Exh A1-3-2, Attachment 1 Footnote 3.

as the capital costs. Although many hydroelectric generation assets have very long useful lives, the OEB is not convinced that there is no functional depreciation until end of life. In fact, reviews of capital projects to sustain, refurbish and replace hydroelectric stations and assets in OPG's prior payment amount applications confirm that capital expenditures and operating costs are needed to maintain capacity to the end of a station's life. Absent ongoing capital and operating expenditures, hydroelectric generation assets will depreciate over time. In the OEB's view, LEI's physical method, which assumes no depreciation until the end of life, is not a realistic basis for the analysis of productivity of hydroelectric generation facilities.[148]

However, the OEB is also not persuaded that PEG's approach using MW as the output measure is appropriate. MW as an output does not seem reasonable as an underutilized asset will still be considered to be productive. How many MWh can be produced from a plant of a particular MW capacity must bear some relationship to productivity, as, for example, improvements in maintenance (e.g. shorter down time) may result in more output from a plant of the same capacity.

In OPG's situation, the major capital investment in the Niagara Tunnel is intended to result in greater production even if the capacity of the Sir Adam Beck plants is not increased. However, at the same time, there are also factors, such as water availability, which are beyond the control of the plant operator. Not all hydroelectric generation is used as base load, so output may also be reduced due to market conditions.

However, PEG's financial approach, which does take into account depreciation of assets in some form, is in the OEB's view more realistic than LEI's approach, although the OEB observes that there is no consensus on the best method for accounting for economic and physical depreciation or deterioration of assets in these types of analyses.

The OEB also has other reservations about aspects of both LEI's and PEG's studies. Neither study included Canadian generators other than OPG. The OEB accepts that Canadian data was difficult to obtain, but is concerned about the reliance solely on OPG's own and U.S. based generators' data. The OEB notes that neither study provided evidence on how the regulatory environment may influence the production of a hydroelectric generator in a particular jurisdiction. Improved sample, data and

[148] The OEB made similar findings about LEI's physical approach assuming no economic depreciation of assets with respect to analyses conducted by LEI in the process to develop the 3rd Generation IRM for electricity distributors. See "Supplemental Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors," EB-2007-0373, September 17, 2008, pages 7-8 and 11-12.

consideration of business and regulatory factors that influence a generator's operations and production would improve the usefulness of the results of studies.

Energy Probe submitted that, while neither expert identified a historical trend in TFP growth, the PEG estimate was superior. Energy Probe's submission and analysis referred extensively to its note on data aggregation which was appended as three appendices to its final submission. Little of this was reviewed in detail with any of the witnesses, nor did Energy Probe provide its own witness. The OEB does not find this information to be helpful.

Given the limitations of the samples, the data and the econometric approaches described above, the OEB finds that, at this time, it cannot accept either LEI's or PEG's analysis in its entirety. Given that these studies suggest a range from 0.29% to -1.01%, the OEB finds that a base productivity factor of 0%, as proposed by OPG, is appropriate for OPG's hydroelectric IRM plan.

The OEB expects that OPG and other stakeholders will take into account the OEB's concerns about the approaches and limitations of the experts' analyses on the record in this proceeding. Improvements in methodology and data, and translation of the results of the studies as to how they more directly translate to rate-setting would provide more useful and convincing information on which OPG could make its next proposal and the OEB would make its determination for subsequent IRM plans.

8.1.5 Stretch Factor

In the EB-2013-0321 decision, the OEB found the hydroelectric benchmarking to be inadequate and ordered OPG to complete a fully independent benchmarking study of hydroelectric operations. The decision stated that the benchmarking should be comparable to the benchmarking in place for the nuclear operations. The decision also stated that the results of the hydroelectric benchmarking study would be important in developing the IR methodology for OPG.

OPG retained Navigant Consulting Inc. (Navigant) to benchmark the hydroelectric operations. The analysis of 2013 performance was filed with the application. OPG's cost and reliability performance are shown in the table below:

Table 34: Navigant Benchmarking Results for
OPG Regulated Hydroelectric Facilities

	Cost Performance Metrics (USD)									Reliability Metrics	
	Operations (K$/Unit)	Plant Maint. ($/MWh)	WW&D Maint. (K$/MW)	B&G Maint. (K$/MW)	Support (K$/MW)	Partial Function ($/MWh)	PA&R (K$/MW)	Total Function ($/MWh)	Invest-ment (K$/MW)	Avail-ability Factor (%)	Forced Outage Rate (%)
OPG Reg. Hydro	$87	$1.41	$1.2	$1.9	$11.8	$5.01	$40	$13.19	$17	92.8	1.3

Q1
Q2
Q3
Q4

WW&D: Waterways & Dams, B&G: Buildings & Grounds, PA&R: Public Affairs & Regulatory

The partial function cost metric is considered by Navigant to be the key cost metric for benchmarking purposes because it includes the functions that are regularly performed at all hydroelectric plants. On this basis, OPG seeks to use a 0.3% stretch factor, and proposes to retain the same stretch factor for the entire test period.

The total function cost includes partial function cost and public affairs and regulatory costs (PA&R). Navigant states that PA&R "is largely not controllable, and in OPG's case is dominated by the Gross Revenue Charges In lieu of Property Tax ($204 million) and the Gross Revenue Charges for water rental fees ($121 million)."[149]

None of the parties opposed the 0.3% stretch factor. OEB staff submitted that there was minimal explanation provided for costs that were excluded and for the benchmarking methodology and that the OEB should set higher expectations for future benchmarking. LPMA noted that there is no process in place to undertake an annual benchmarking exercise to adjust the X-factor each year. LMPA suggested the OEB consider an annual benchmarking exercise for OPG so that the stretch factor could change each year during the IRM.

Findings

OPG's performance with respect to the reliability metrics and the partial function cost metric is second quartile. The OEB accepts that a stretch factor of 0.3% is appropriate for this first hydroelectric IRM term. The OEB does not expect annual benchmarking during the IRM term; however, the OEB expects improved benchmarking going forward. While the Navigant analysis is an improvement over previous filings, the OEB expects some trend reporting and trend analysis in future benchmarking. The OEB also expects

[149] Exh A1-3-2 Attachment 2 page 4.

OPG to continue to examine whether additional costs should be benchmarked for the purposes of future stretch factors. OPG shall file a benchmarking study with its next cost based payment amount application.

8.1.6 Capital Expenditure and Rate Base Issues

OPG has proposed a price cap IR with comprehensive coverage, i.e. capital and OM&A. There was considerable discussion during the oral hearing about the operation of the Capacity Refurbishment Variance Account (CRVA) under price cap IR, and whether there might be double counting.

The CRVA was established to give effect to section 6(2)4 of O. Reg. 53/05, which requires the OEB to ensure that OPG recovers costs incurred to increase the output of, refurbish or add operating capacity to a generation facility. The CRVA was first established for the interim period (i.e. April 1, 2005 to the date of the OEB's first ever payment amounts order) to record the costs to increase output of, refurbish or add capacity. In the EB-2007-0905 decision, the OEB approved the continuation of the CRVA to record cost variances associated with projects that satisfy the requirements of section 6(2)4 of O. Reg. 53/05. The OEB has approved the continuation of the CRVA in subsequent cost of service proceedings.

In response to an SEC interrogatory,[150] OPG provided information relating to hydroelectric projects and amounts that are expected to be recorded in the CRVA during the test period. Approximately 35% of proposed test period capital is CRVA eligible.

PEG gave opinion evidence on the operation of the CRVA for hydroelectric projects. PEG's opinion is that the OEB should not allow OPG to use the CRVA, and require that supplemental capital costs be addressed through incremental capital modules.[151] If the OEB approves the CRVA as proposed, PEG's opinion is that an increase in the X-factor (i.e. productivity factor plus stretch factor) is warranted. PEG estimated this would mean an increase from 0.29 to 0.74.[152] CME and LPMA submitted that the appropriate X-factor is 0.74.

During the oral hearing, the OEB directed OPG to file additional evidence to explain the operation of the CRVA as it relates to hydroelectric operations during the test period. OPG filed Exh H1-1-2 on April 4, 2017. The evidence set out the capital related revenue requirement (sustaining and CRVA eligible) underpinning the current hydroelectric

[150] Exh L-11.1-SEC-95.
[151] Exh M2 page 6.
[152] Tr Vol 11 page 26.

payment amounts. Under OPG's proposal, there will be no additions to the CRVA until depreciation escalated by I-X is exceeded. The CRVA eligible additions would then be compared with the $0.9 million CRVA amount underpinning current payment amounts.

SEC submitted that the threshold should include ROE and cost of debt as well as depreciation. OEB staff submitted that the $0.9 million reference amount should be escalated by I-X.

Findings

The CRVA was designed for and implemented when OPG's payment amounts were determined through a more traditional cost of service regime, where detailed actual and forecasted costs and revenues were considered. This same approach continues through the multi-year nuclear plan. However, as approved elsewhere in this Decision, hydroelectric payment amounts will now be set through a price cap IRM approach under which revenues recovered through payment amounts are not directly linked to costs.

Nevertheless, section 6(2)4 of O. Reg. 53/05, requires the continuation of the CRVA regardless of the form of rate-setting approved or adopted by the OEB. The primary issue then is to address how the CRVA will operate under the hydroelectric IRM plan.

To date, the CRVA has been designed and executed so as to ensure that OPG recovers the full amount of prudently incurred qualifying costs through approved payment amounts. If there is any shortfall (over-recovery), rate riders are used to recover (refund) the incremental amount. For prudently incurred costs of qualifying capital and operating costs, OPG is held whole, as required by O. Reg. 53/05.

In the EB-2013-0321 decision, the approved hydroelectric revenue requirement included an annual amount of $0.9 million for CRVA-qualifying capital projects. This amount is recovered through the approved 2014-15 payment amounts which, with one adjustment as discussed elsewhere in this Decision, are the going-in rates for OPG's Price Cap IR plan. The $0.9 million thus represents the revenue requirement for CRVA-qualifying projects already recovered through payment amounts and which does not need to be recovered again through the CRVA.

The OEB finds that this threshold should be adjusted by the hydroelectric IRM inflation less productivity factor (I – X), which adjusts the payment amounts. As there is no change to the hydroelectric production forecast from the 2014-15 payment amounts approved in EB-2013-0321, the revenue requirement is similarly adjusted. This allows for inflationary cost increases, less expected productivity

improvements, to be factored in to the approved rates over time. These inflationary less productivity factors relate to both capital and operating costs. The price cap adjustment is also applied uniformly to capital projects that qualify for CRVA treatment, and those that do not.

In the OEB's view, price cap-adjusted payment amounts recover a similarly adjusted revenue requirement amount each year. The CRVA will recover, through the rate riders approved at the time of disposition, that revenue requirement on qualifying projects not already recovered through approved payment amounts.

OPG submitted that it was not aware of any decisions that require threshold amounts to be escalated by a price cap (or I – X) index. While there may not be any explicit findings in OEB decisions, in the *Report of the OEB on New Policy Options for the Funding of Capital Investments: Supplemental Report* (EB-2014-0219), issued January 22, 2016, the OEB revised the methodology for the materiality threshold applicable to Incremental Capital Module and Advanced Capital Module applications to take into account both the impacts of IRM rate adjustments, and growth in customers and demand, over time. This methodology for multi-year materiality thresholds has been applied by the OEB in ACM and ICM decisions subsequent to this report.

The OEB agrees with OEB staff and intervenors that the CRVA under the hydroelectric IRM plan is similar in many ways to the ACM/ICM, so the OEB's policy on the latter provides a useful precedent.

The adjustment of the threshold for the I – X annual price cap adjustment is largely mechanistic once the Input Price Index is announced each year. While the impact may be small on the threshold based on the payment amounts approved in EB-2013-0321, the OEB notes that the CRVA qualifying capital expenditures are significant, amounting to $335 million or 35% of OPG's forecasted hydroelectric capital additions over the five-year term.

The OEB accepts OPG's proposal with respect to the threshold for the ratio of sustaining capital to CRVA-related capital used to evaluate eligibility for disposition of hydroelectric CRVA balances. The OEB agrees with OPG that SEC's inclusion of the cost of debt, ROE and PILs as "Capital Built into Base Rates" is incorrect.[153] The cost of debt and the ROE are financing costs that OPG must pay out to, respectively, lenders and shareholders (or reinvest to further increase shareholders' equity in the case of the latter) for the investments in hydroelectric capital assets. Taxes and PILs are an

[153] SEC submission pages 126-127 and Exh K21.1 page 15.

expense. These costs are part of the revenue requirement, but not of rate base as SEC argues, and they are not available to fund replacement or new investment except in the case of retained earnings.

8.1.7 Other Elements

OPG's application states that it is eligible to apply for an Incremental Capital Module (ICM) during the term of this hydroelectric IRM plan, and that it is permitted to use an Advanced Capital Module (ACM) in subsequent applications.[154] The OEB's policy on unforeseen events and Z-factor applications will apply during 2017-2021 term.

The submissions of parties focused on the threshold for Z-factor applications. OPG's proposal was $10 million which is the materiality threshold that OPG has applied in each application for impact statements and accounting orders. LPMA submitted that the threshold should be updated to $12.7 million for the hydroelectric business, while CCC submitted that as OPG is an integrated company, the corporate threshold should be $25 million. OPG replied that the materiality ceiling for distributors is $1 million.

OPG proposes to continue all existing hydroelectric deferral and variance accounts. Parties to the settlement proposal, which was accepted by the OEB on March 20, 2017, agreed to fully settle issue 9.6, "Is the proposed continuation of deferral and variance accounts appropriate?"

Annual reporting for the regulated hydroelectric business is addressed in section 10.2.

As noted in the application, OPG proposes that a regulatory review may be initiated if OPG's annual reporting shows performance outside the ± 300 basis points ROE dead band, or if performance erodes to unacceptable measures.

Findings

The ICM and ACM are part of the established Price Cap IR methodology. The Rate Handbook notes that the ACM/ICM approach is also applicable to all rate-regulated utilities under the OEB's oversight.[155] The OEB notes that OPG has not rebased hydroelectric payments in this application, and it has not filed a capital plan, analogous to a Distribution System Plan that an electricity distributor must provide, in this

[154] Exh A1-3-2 page 22.
[155] Handbook for Utility Rate Applications Appendix 3: Rate-setting Policies. Page 27 notes that the ACM/ICM approaches or analogous approaches would be available to all rate-regulated utilities under a price cap IR or similar rate adjustment mechanism, but would not be available under a Custom IR plan.

application or previously. There is no reason not to allow applications for ICMs if they comply with OEB policy during the term of this hydroelectric IRM plan.

LPMA has proposed higher and different thresholds for the hydroelectric and nuclear businesses, however, the OEB finds that this proposal could create confusion. The current OPG $10 million threshold is significantly higher than the highest threshold applied for distributors. The OEB finds that the $10 million threshold will continue to apply for all matters, except for the filing of project business cases where the threshold is $20 million.

The OEB accepts the proposal that a regulatory review may be initiated if OPG's ROE reporting for the regulated business indicates performance ± 300 basis points. This provision is consistent with the RRF and was not opposed by any of the parties.

8.1.8 2017 and 2018 Hydroelectric Payment Amounts

In accordance with the Order section below, OPG shall file a draft payment amounts order reflecting the hydroelectric payment amount setting determinations in this Decision for both 2017 and 2018 based on the applicable parameters.

The calculations for the IPI for OPG's hydroelectric payment amounts per the methodology approved by the OEB are provided in Schedule H to this Decision.

8.2 Nuclear Payment Amount Setting

8.2.1 Application for Custom IR

The OEB established the Custom IR framework for utilities with significant operating and capital expenditures needs. OPG proposed a Custom IR framework for 2017-2021 for the nuclear business. The proposal is based on five individual revenue requirements with 0.3% stretch reductions on base and allocated corporate support OM&A. OPG states that these reductions are in addition to the performance improvement initiatives in its business plan. OPG's proposal was informed by several sources, including the OEB's EB-2012-0340 report, the Renewed Regulatory Framework for Electricity principles, the OEB's letter of February 17, 2015 and O. Reg. 53/05. The regulation was amended in November 2015, requiring the OEB to approve revenue requirements on a

five year basis for the first 10 years of the period beginning on January 1, 2017 and ending when the DRP ends.[156]

OPG states that its Custom IR proposal is consistent with the policy objectives of the RRF and that the proposal recognizes the uncertainty and risk related to Pickering and Darlington operation in the test period. The application at Exh A1-3-2 summarizes the proposed Custom IR framework with respect to the RRFE. OPG's proposal was supported by the PWU.

Several intervenors submitted that OPG's proposal is a five-year cost of service application and not a Custom IR as it lacks trade-offs between OM&A and capital and is not based on outcomes. The intervenors submitted that the proposal does not sufficiently consider the principles of the RRF and the considerations for Custom IR applications set out in the Rate Handbook issued by the OEB on October 13, 2016.

OPG argued that its proposal is based on a challenging business plan and that the stretch reductions decouple rates from costs. Unlike distributors, OPG's payment amounts are 100% variable which incents OPG to operate efficiently. As the application was filed in May 2016, OPG also argued that it is inappropriate to apply new Rate Handbook requirements.

LPMA submitted that the costs associated with DRP and PEO should be dealt with separately and on a cost of service basis. LPMA's proposal was raised for the first time in the argument phase and OPG states that the proposal should be rejected.

Findings

As noted previously, the OEB has been considering some form of IR for OPG nuclear payment amounts since 2006. The EB-2012-0340 consultation concluded that alternatives to the short term cost of service approach should be used for setting nuclear payment amounts. The letter of February 17, 2015 stated the OEB's expectation of a Custom IR framework for the nuclear assets.

While the OEB sets and approves the form and methodology for setting nuclear payment amounts, this must be done in accordance with the requirements of O. Reg. 53/05. The OEB finds that OPG's Custom IR application moves the determination of nuclear payment amount along the spectrum from a pure cost-based review as is done in traditional cost of service applications towards an outcomes- and results-based review considered by the RRF. There is no threshold test for Custom IR applications, however, and the OEB has considered and decided on many variations of multi-year

[156] Section 6(2)12(ii) of O. Reg. 53/05.

applications by utilities in both electricity and natural gas; such applications must also take into account the circumstances unique to the utility in each case.

The OEB agrees with OEB staff that OPG has generally met the standards for a Custom IR application as set out in the Rate Handbook that was issued after the application was filed. The OEB finds that OPG was informed by prior applications and decisions, and also took into account the OEB's expectations in prior payment amounts decisions and in the March 28, 2013 report[157] and the subsequent letter from the OEB issued on February 17, 2015[158] in developing its proposed hydroelectric and nuclear payment amounts plans. The OEB also notes that the Rate Handbook is an articulation of policy; as such, it is meant to inform the industry and stakeholders of expectations and to explain the lens through which a review of cost based applications will be accomplished. Indeed, the policies in the Rate Handbook inform the OEB panel deciding an application, and the panel decides on whether the application has sufficiently adhered to the principles and spirit of a policy based on the evidence before it.

OPG provided a five-year forecast of operating and capital costs and production. OPG has proposed productivity gains beyond those that it states are already embedded in its business plan. Several independent benchmarking studies, which are integral to a Custom IR application, were filed and tested during the proceeding. The OEB notes that empirical evidence was one of the key ingredients for a complete Custom IR application discussed in the Rate Handbook.

As the Rate Handbook was issued after the EB-2016-0152 application was filed, certain filing expectations were not specifically addressed by OPG in its application, including trade-offs between OM&A and capital. However, taken in aggregate, the OEB finds that OPG has reasonably satisfied the expectations for a Custom IR plan for setting nuclear payment amounts.

OPG does not have a direct relationship with electricity customers as it sells electricity into the IESO controlled market. The application states that OPG intends to develop a formal customer engagement process during the IR period that may provide insight into customers' preferences with respect to OPG priorities and plans. The OEB expects that process to inform OPG's next application.

[157] Report of the Board: *Incentive Rate-making for Ontario Power Generation's Prescribed Generation Assets* (EB-2012-0340), March 28, 2013.
[158] OEB-issued letter of February 17, 2015 regarding Incentive Rate-setting for Ontario Power Generation's Prescribed Generation Assets.

8.2.2 X-Factor

OPG's Custom IR X-factor only includes a stretch factor. OPG did not propose a nuclear industry productivity adjustment. OPG states that the nature and scale of capital work planned for the test period meant that past productivity trends would not be a reasonable indicator of predicted productivity.[159] No submissions were filed expressing concern with the lack of an industry productivity factor.

The application proposes a stretch factor of 0.3% on base and allocated corporate support OM&A. The estimated impact is a $50 million reduction in test period revenue requirement. The proposed stretch factor was based on the results of the 2015 nuclear benchmarking report. The 2012-2014 three year rolling average Total Generating Cost (TGC) result for Darlington was first quartile and for Pickering was fourth quartile. These results were based on a comparison of facilities for both major operators (i.e. operating more than one facility) and single facility operators. OPG assumed a 0% stretch factor for Darlington and a 0.6% stretch factor for Pickering, and weighted the stretch factors by the most recent OEB approved production forecast to determine the 0.3% stretch factor.

OPG, and consultants that it retained, have pointed out the challenges faced in benchmarking nuclear costs and operations. There is a limited population of nuclear operators world-wide. Further, the nuclear technology chosen has implications on capital versus operating functions and costs. The pool of CANDU nuclear operators is even more limited. The age and size of stations also puts constraints on scale efficiencies.[160]

The 2016 nuclear benchmarking report was filed in response to an interrogatory. The 2013-2015 TGC result for Darlington was second quartile and Pickering remained in the fourth quartile. OPG explained that the drop in performance for Darlington was related to the 2015 vacuum building outage and outages to replace primary heat transport pump motors.

In addition to station specific results, the annual nuclear benchmarking reports provide utility results for major operators. OPG placed 10th out of a comparator group of 13 for the 2012-2014 three year rolling average TGC. OPG's performance slipped to 12th out of a comparator group of 13 for the 2013-2015 TGC. OEB staff and several intervenors submitted that these utility results supported a higher stretch factor; most parties proposed 0.6%. SEC submitted that a stretch factor based on a benchmarking result for

[159] Exh A1-3-2 page 33.
[160] Exh. F2-1-1, AIC page 78, Tr Vol 13 pages 13-14.

OPG as a whole is appropriate as ratepayers pay a single nuclear payment amount. OPG argued that the submissions do not reflect historic performance or realistic improvement opportunities, specifically the inherent limitations of Pickering.

SEC submitted that, should the OEB decide that station specific results should underpin the stretch factor, the most recent TGC results from the 2016 nuclear benchmarking report should be used and the production forecast for the test period should be used. SEC calculated a stretch factor ranging from 0.45% to 0.46% over the plan term (2017-2021).[161] LPMA proposed that these results be rounded up to 0.5%. OPG argued that the OEB has not calculated any aspect of a stretch factor based on forecast performance. While OPG does not support the use of the 2016 nuclear benchmarking results, it calculated a stretch factor of 0.43% based on the TGC data and the proposed methodology.

Findings

The OEB agrees that determining an appropriate nuclear generation industry productivity factor for the test period would be a challenge. Further, the EB-2012-0340 report noted the limited reference population of CANDU operators and the difficulty in specifying an appropriate cost function for nuclear assets.

The absence of a productivity factor for the current Custom IR plan does not mean that future applications should have the same structure. The OEB's expectations regarding an independent productivity study continue, and OPG should be prepared to file work plans for this study when DRP approaches its conclusion.

The OEB does not accept the 0.3% stretch factor proposed by OPG. In the absence of an econometric study, the OEB agrees with the parties who submitted that the 2016 nuclear benchmarking report of 2015 TGC results is the best reference for the Custom IR stretch factor.

OPG argues that 2015 was not a typical year due to the vacuum building outage and PHT motor replacements. Benchmarking, by its nature, compares the performance of entities. Those entities face challenges over time, including outages and shutdowns, just as OPG does. TGC data are presented as three-year rolling averages for OPG and for the comparison utilities. The OEB finds that this presentation of benchmarking performance is reasonable and addresses those years for which operations are atypical. In further support of this finding, the OEB notes that the benchmarking results filed in this proceeding are directionally consistent with the results of nuclear

[161] SEC Submission page 131.

benchmarking analyses considered in, and which the OEB has commented on and based decisions on, in previous payments applications.[162]

Pickering TGC has been consistently in the fourth quartile. OPG argues that Pickering is limited by the size of its units and the first generation CANDU design, and that it cannot be as cost competitive as other nuclear stations. OPG's proposed stretch factor calculation is based on benchmark performance of each OPG facility and includes comparison with major operators and seven single station operators.[163] OPG has determined that the stretch factor based on 2014 data is 0.3%, while the stretch factor based on 2015 data is 0.43%.

The OEB finds that OPG's arguments regarding the limitations of Pickering are contrary to OPG's application for enabling and restoration costs for Pickering and the forecast of $4 billion to operate Pickering beyond 2020. Energy Probe argued: "If OPG can't find a way to move Pickering into, at least the median level of performance, Energy Probe questions why the plant should continue to remain in operation."[164]

That said, as a single OPG nuclear payment amount is set reflecting both Pickering and Darlington, the OEB finds that benchmarking by major operators is the appropriate reference in any event. The OEB notes that both Pickering and Darlington are proposed to be in operation during the current five-year term, and does not find OPG's argument that Pickering and Darlington should receive separate attention, and that emphasis should be placed of Darlington,[165] to be convincing. OPG's 2015 overall performance against the comparators, which excludes the seven single station operators, is 12th out of 13.[166] This is bottom quartile performance, and the OEB finds that a stretch factor of 0.6% is appropriate.

The OEB's findings with respect to benchmarking are found in section 5.4 of this Decision. The benchmarking results are a supporting factor for reductions in OM&A as discussed in section 5.6 of this Decision.

[162] Decision with Reasons EB-2013-0321, November 20, 2014, pp. 45-47, Decision with Reasons EB-2010-0008, March 10, 2011, pp. 45-46, Decision with Reasons, November 3, 2008, pp. 28-32. OEB staff's submission (May 19, 2017 [revised July 10, 2017 following OPG's review of the redacted material] pages 82-84) references the benchmarking results filed in this application relative to the performance reported in the previous payments applications.
[163] Reply Argument page 60.
[164] Energy Probe Submission page 45.
[165] Reply Argument pages 259-260.
[166] Exh L-6.2-SEC-63, Tr Vol 6 page 129.

8.2.3 Application of Stretch Factor

As previously noted, OPG has proposed that the stretch factor apply to base and allocated corporate support OM&A. The annual revenue requirement related to these costs is approximately $1,700 million and represents 75% of OM&A. These OM&A categories were selected as it is reasonable to expect the company to make incremental performance improvements in these costs during the Custom IR term. The following table summarizes historical and forecast operating costs. OPG's proposal would apply to the costs at lines 1 and 8:

Table 35: Nuclear Operating Costs

Line No.	Cost Item	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	OM&A:									
	Nuclear Operations OM&A									
1	Base OM&A	1,127.7	1,127.1	1,159.6	1,201.8	1,210.6	1,226.0	1,248.4	1,264.7	1,276.3
2	Project OM&A	105.7	101.9	115.2	98.2	113.7	109.1	100.1	100.2	86.8
3	Outage OM&A	277.5	221.3	313.7	321.2	394.6	393.8	415.3	394.4	308.5
4	Subtotal Nuclear Operations OM&A	1,510.8	1,450.3	1,588.5	1,621.3	1,718.9	1,728.9	1,763.8	1,759.4	1,671.6
5	Darlington Refurbishment OM&A	6.3	6.3	1.6	1.3	41.5	13.8	3.5	48.4	19.7
6	Darlington New Nuclear OM&A[1]	25.6	1.5	1.3	1.2	1.2	1.2	1.2	1.3	1.3
7	Allocation of Corporate Costs	428.4	416.2	418.8	442.3	448.9	437.2	442.7	445.0	454.1
8	Allocation of Centrally Held and Other Costs[2]	413.5	416.9	461.0	331.9	80.2	118.2	108.3	91.1	81.3
9	Asset Service Fee	22.7	23.3	32.9	28.4	27.9	27.9	28.3	22.9	20.7
10	Subtotal Other OM&A	896.5	864.1	915.5	805.0	599.7	598.3	584.1	608.6	577.1
11	Total OM&A	2,407.3	2,314.5	2,504.0	2,426.3	2,318.6	2,327.1	2,347.9	2,368.0	2,248.7
12	Nuclear Fuel Costs	244.7	254.8	244.3	264.8	219.9	222.0	233.1	228.2	212.7
	Other Operating Cost Items:									
13	Depreciation and Amortization	270.1	285.3	298.0	293.6	346.9	378.7	384.0	524.9	338.1
14	Income Tax	(76.4)	(61.5)	(31.8)	(18.7)	(18.4)	(18.4)	(18.4)	51.2	51.7
15	Property Tax	13.6	13.2	13.2	13.5	14.6	14.9	15.3	15.7	17.0
16	Total Operating Costs	2,859.3	2,806.2	3,027.8	2,979.4	2,881.6	2,924.4	2,961.9	3,187.9	2,868.2

Source: Exh F2-1-1 Table 1

OEB staff and several intervenors submitted that OPG's proposal was too narrow; most parties submitted that the stretch factor should apply to total OM&A (i.e. line 11 of the table), although some parties observed that certain costs, e.g. DRP, are CRVA eligible. OPG argued that it is not reasonable to expect additional efficiencies in the other cost categories. For example, outages are unique planned work not a steady state function, and centrally held costs are non-discretionary costs that are not operational costs, e.g. insurance, for which savings cannot be realized.

Most intervenors also proposed that the stretch factor should also apply to capital, referring to the OEB's decision in the Toronto Hydro-Electric System Limited (THESL) Custom IR proceeding, EB-2014-0116. The OEB found that the THESL application did

not contain enough productivity incentives and decided that the stretch factor should apply to THESL's custom capital factor.[167] SEC noted that TGC reflects benchmarking of both operating and capital costs, and that the stretch factor should apply to both operating and capital costs as well, referencing the OEB's same finding in this regard with respect to THESL's recent Custom IR application.[168] SEC submitted that, if the stretch factor is only applied to OM&A, the metric that sets the stretch factor should be an operating cost metric. OPG argued that its capital projects are large and discrete while distributors execute routine and repetitive capital work. The stretch factor should only be applied to certain operating costs. The stretch is based on TGC because it was determined to be the best overall financial metric for OPG by ScottMadden.

Findings

The OEB finds that it is appropriate to apply the stretch factor to operations OM&A, i.e. the sum of base, project and outage OM&A at line 4 of the table above, and corporate costs at line 7 of the table above. The enabling costs for PEO are addressed in section 5.7 of this Decision, and are excluded from the stretch factor.

The OEB rejects OPG's arguments that project OM&A and outage OM&A activities are outside the scope of what OPG routinely undertakes as part of its operations. The OEB has reviewed project OM&A Business Case Summaries over the course of this proceeding and agrees with parties that there are opportunities to improve productivity. Each Darlington unit undergoes a planned outage every three years and Pickering units undergo a planned outage every two years. The OEB accepts that certain activities may be different from previous outages, but finds that there are outage OM&A productivity opportunities as there are many standard elements included in the scope of each outage.[169]

Consistent with the OEB's finding in the THESL Custom IR application EB-2014-0116 (referenced above), the OEB finds that the stretch factor should apply to both capital and operating costs. Thus, the stretch factor will also apply to nuclear operations and support service in-service capital additions. The OEB expects that OPG will achieve

[167] Decision and Order, Toronto Hydro-Electric System Limited, EB-2014-0116, page 27, "The second custom aspect of Toronto Hydro's Application is a custom capital factor. It is described as a scaling adjustment that will annually incorporate the cost recovery for THESL's capital program from 2016-2019. It is calculated by dividing the difference between the year over year capital requirement by the total revenue requirement. That percentage amount is then added to base rates. The C-factor is the only means of capital recovery proposed for 2016-2019 (after rebasing)."
[168] SEC Submission page 131, referencing the EB-2014-0116 Decision and Order at page 18.
[169] Exh F2-4-1 page 6.

productivity improvements with respect to the delivery of these programs during the test period.

The OEB's findings on nuclear operations capital and rate base are found in section 5.2 of this Decision.

8.2.4 ROE Update

OPG proposes that the revenue requirement impact of any change in ROE in the Custom IR term be recorded in the new Nuclear ROE Variance Account. The OEB is not approving the new account. This aspect of the application is discussed in section 6 of this Decision.

8.2.5 Other Elements

Annual reporting for the nuclear business is addressed in section 10.3.

OPG proposes that a regulatory review may be initiated if OPG's annual reporting shows performance outside the ± 300 basis points ROE dead band, or if performance erodes to unacceptable measures. The OEB's review of this proposal is in section 8.1.

As noted in section 8.1, several intervenors have proposed an increase to the $10 million threshold that OPG applies for impact statements and accounting orders. LPMA submitted that the threshold should be updated to $14.4 million for the nuclear business, while CCC submitted that OPG is an integrated company and that the corporate threshold should be $25 million.

Findings

The OEB finds that the $10 million threshold for OPG is appropriate. The maximum materiality threshold for electricity distributors, including Hydro One, is $1 million. Retaining the $10 million threshold would be consistent with the payment order provisions of EB-2012-0002 and EB-2013-0321. The OEB finds that the $10 million threshold will continue to apply for all matters, except for the filing of project business cases where the threshold is $20 million.

9 MID-TERM REVIEW

OPG seeks approval of a mid-term production review in the first half of 2019. The mid-term application would seek an update of the nuclear production forecast and related nuclear fuel expense for the period July 1, 2019 to December 31, 2021 and disposal of applicable audited 2018 year-end deferral and variance account balances. In the second impact statement, Exh N2-1-1, OPG updated its application to exclude the revenue requirement impact of the D2O project. OPG proposed that the prudence review of the D2O project occur at the mid-term review.

Historical production forecasts are reviewed in section 5.1. For a number of reasons, OPG has never achieved its production forecast in the period 2008 to 2015. OPG states that the mid-term review is necessary as there is substantial uncertainty with respect to production in the second half of the Custom IR term. The impact of the production variance would be recorded in the proposed Mid-term Nuclear Production Variance Account. It is OPG's view that its proposal is consistent with the rate smoothing requirements of O. Reg. 53/05 which require the OEB to determine nuclear revenue requirement for each year on a five-year basis. While the revenue requirement must be determined on a five-year basis, there is no similar requirement for production.

Several intervenors objected to the mid-term review, noting the OEB's expectation in the Rate Handbook of no further updates once rates are set in a Custom IR unless there are exceptional circumstances.[170] In OPG's view, it is unfair to require that its application comply with the Rate Handbook when the application was filed six months prior to its issuance.

Based on review of historical performance, CME argued that the mid-term review asymmetrically protects OPG. The PWU submitted that the proposal is reasonable and noted that the proposal is symmetrical. Similarly, OEB staff observed that an early or a late completion of Darlington Unit 2 refurbishment would have a significant impact on production, one favouring OPG, the other favouring ratepayers.

There were several submissions proposing revisions to the scope of the mid-term review, e.g. limiting scope to DRP or PEO, or revising scope to review DRP or PEO costs. OPG argued that reduced scope would result in an ineffective production forecast review, while cost review is addressed by other means.

AMPCO submitted that Darlington Unit 2 return to service was uncertain, and that the OEB should establish 2020 and 2021 payment amounts on an interim basis, and

[170] Handbook for Utility Rate Applications, October 13, 2016, page 26.

finalize them as part of the mid-term review. OPG argued that this submission is contrary to O. Reg. 53/05.

Should the OEB approve OPG's proposed mid-term review, OEB staff submitted that the review should be limited to 2020 and 2021 as OPG's previous applications have been two-year cost of service followed by a one-year lag. OPG did not object to this submission, providing it was able to clear the Pension & OPEB Cash Versus Accrual Differential Deferral Account at the same time as its 2018 hydroelectric payment amounts application.

Findings

The OEB does not approve the mid-term review proposal related to production forecast. As a result, the OEB does not approve the Mid-Term Nuclear Production Variance Account that was proposed to record the impacts of adopting a more accurate production forecast for the second half of the Custom IR term.

One of the reasons put forward by OPG for a mid-term review is the inherent inaccuracy of forecasting, particularly for the five-year term. The OEB finds that this reason is not consistent with the Custom IR framework. This is supported by the Rate Handbook which states that:

> After the rates are set as part of the Custom IR application, the OEB expects there to be no further rate applications for annual updates within the five-year term, unless there are exceptional circumstances, with the exception of the clearance of established deferral and variance accounts. For example, the OEB does not expect to address annual rate applications for updates for cost of capital, working capital allowance or sales volumes.[171]

While the OEB agrees that it is not reasonable for OPG to have aligned its application perfectly with the Rate Handbook given the timing of the latter, the expectations regarding Custom IR framework applications were first noted in the RRF Report in 2012. The OEB noted that it "expects a distributor's application under Custom IR to demonstrate its ability to manage within the rates set, given that actual costs and revenues will vary from forecast."[172]

The OEB agrees with the intervenors that the forecasting of production is not an exceptional circumstance requiring a mid-term review.

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[171] Handbook for Utility Rate Applications, page 26.
[172] Report of the Board, *Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach*, October 18, 2012, page 19.

AMPCO submitted that the mid-term review of load forecast has been previously approved for one distributor's Custom IR application,[173] and that the rates for the later period were declared interim. AMPCO proposed the same for OPG. The OEB agrees with OPG that approving interim payment amounts for the later years of the test period is contrary to section 6(2)12 of O. Reg. 53/05, so this approach is not a viable option for OPG.

OPG's mid-term review proposal also refers to increased production risk during the second half of the five-year term due to the work required to enable PEO and DRP. Some of the parties proposed limiting the scope of the mid-term review to PEO and/or DRP. OPG argued that limiting the review to PEO or DRP would be inappropriate as it ignores the interrelationship of these programs with plant operations. The OEB does not approve a mid-term review for production forecast specifically related to PEO or DRP.

The OEB's findings regarding PEO are in section 5.7. Should the outcome of the technical assessments to determine fitness for service beyond 2020, or system planning decisions, significantly impact operation of Pickering in 2021, OPG shall notify the OEB. In cross-examination, OPG confirmed that ceasing Pickering operation in 2020, "would be a very significant event that would fundamentally change the outlook on the company, and we would come back to the Board and seek direction in that event."[174]

The OEB's findings on DRP are in section 5.3. The OEB heard a great deal of evidence in this proceeding related to the ten years of planning involved in mapping out the DRP project. The OEB therefore finds a mid-term review to deal with any uncertainties surrounding DRP to be unnecessary. OPG's evidence is that there will be uncertainties related to the project, and that OPG is well positioned to deal with those issues. In the event that OPG does not proceed with refurbishment of Unit 3, this would represent a fundamental change to the outlook of the company and OPG would most likely return to the OEB to seek direction. For these reasons, a mid-term review to deal with production forecast related to DRP is unnecessary.

In the event that PEO or DRP do not proceed as OPG has set out in its application, there is the possibility that OPG's regulated return will exceed the ± 300 basis points ROE dead band. At that point, a regulatory review may be initiated.

The OEB's direction with respect to future deferral and variance account balance review and disposition is discussed under section 7, Deferral and Variance Accounts, and section 11, Payment Amount Smoothing and section 12, Implementation.

[173] Oshawa PUC Networks Inc., EB-2014-0101.
[174] Tr Vol 6 page 158.

10 REPORTING AND RECORD KEEPING

10.1 General Reporting

The EB-2010-0008 decision set out financial and operating reports that OPG would file beginning in 2011.[175] OPG proposed to continue to file those reports. In reply submission, OPG requested a two-week extension to file the actual regulatory return, after tax on rate base. The current requirement is a filing by June 30th of each year, and OPG noted that the timeline is challenging as corporate tax returns are also due at the same time.

OEB staff had no concerns with the general reporting. OEB staff noted in its submission that the Rate Handbook requires rate-regulated utilities to propose scorecards in their next cost based rate applications. The Rate Handbook was issued in October 2016, approximately five months after OPG's application was filed. OEB staff said it expects that OPG will supplement (or summarize) its reporting with a proposal for a detailed scorecard as part of its next cost based application.

Findings

OPG shall continue to file the financial and operating reports set out the in the EB-2010-0008 decision. The OEB approves the extension requested for the filing of the actual annual regulatory return, after tax on rate base. That report shall be filed by July 31st of each year.

The OEB's findings with respect to DRP reporting, regulated hydroelectric reporting and nuclear reporting are found in sections 5.3, 10.2 and 10.3 respectively.

OPG shall file a proposal for a detailed scorecard as part of its next cost based application. OPG shall refer to the performance scorecard guidance in the Rate Handbook.

10.2 Hydroelectric Performance Reporting

OPG proposed to annually report on safety, reliability and cost effectiveness of the regulated hydroelectric business. The measures are those that OPG has included in

[175] EB-2010-0008, Decision with Reasons, March 10, 2011, page 150.

previous payment amount applications, and are summarized below. OPG proposed to file the prior year's actual performance and the targets for the current year.

Hydroelectric Performance Measures

Category	Measure
Safety	All Injury Rate (per 200k hours)
	Environmental Performance Index (%)
Reliability	Availability Factor (%)
	Equivalent Forced Outage Rates (%)
Cost Effectiveness	OM&A Unit Energy Cost ($/MWh)

OEB staff submitted that the targets for the prior year should be filed in addition to the performance for the prior year. OEB staff also submitted that five years of performance results should be filed to be consistent with the Electricity Distributor Scorecards. OPG did not object to these submissions.

Through technical conference questions, and oral hearing cross-examination, OPG confirmed that the cost effectiveness measure includes only base OM&A and some project OM&A. OPG also confirmed that it does not propose to provide quartile analysis for the OM&A Unit Energy Cost. This measure is based on approximately 50% of the total OM&A costs. It also excludes the Gross Revenue Charge, which is the single largest hydroelectric expense.

OEB staff observed that in 2016, "OPG adopted Total Generating Cost (TGC) per MWh as an enterprise-wide measure of operational cost effectiveness, in addition to TGC per MWh metrics for each of the Nuclear and Hydroelectric operations."[176] OEB staff submitted that OPG should report both OM&A Unit Energy Cost and TGC/MWh for the regulated hydroelectric business. In reply, OPG stated that it does not calculate TGC/MWh separately for the regulated hydroelectric business, and it does not have a TGC/MWh target for the regulated hydroelectric business.

[176] Exh N1-1-1 Attachment 1 page 4.

Findings

OPG agreed with the OEB staff submission on hydroelectric performance reporting with the exception of the OEB staff proposal regarding the TGC/MWh measure for the regulated hydroelectric business.

The OEB observes that OPG's hydroelectric OM&A Unit Energy Cost measure is the same information that OPG has filed in previous cost based proceedings. The data source is the Electricity Utility Cost Group (EUCG) and in OPG's view it is a reliable and fair representation of the trend within the hydroelectric business.[177] However, the OEB found in the previous proceeding, EB-2013-0321, that the EUCG data was inadequate as only 50% of total OM&A expense was benchmarked, and there was no independent review. In this proceeding, OPG filed a hydroelectric benchmarking review prepared by Navigant[178] which is discussed in section 8.1 of this Decision. The OPG hydroelectric performance reporting proposal does not include any additional cost measures benchmarked by Navigant. At the oral hearing, OPG confirmed that it does not propose to provide benchmark quartile analysis. The OEB finds that OPG's proposal for hydroelectric performance reporting is very limited compared with the performance reporting for the nuclear business, which is discussed in section 5.4 of this Decision.

OPG's consultant, ScottMadden, and OPG identified TGC/MWh as one of three key metrics for the nuclear business in 2009 and OPG has included TGC/MWh in its annual nuclear performance reports since 2009. The annual nuclear performance reports that will be filed with the OEB will include TGC/MWh for Pickering, Darlington and OPG Nuclear and the benchmarked quartile will also be identified in the reports. OPG recognized that TGC/MWh is a key measure of operational cost effectiveness and adopted the measure in 2016 on an enterprise wide basis and for the hydroelectric business as well. OEB staff proposed that OPG file TGC/MWh for the regulated hydroelectric business. OPG replied that it does not calculate TGC/MWh for the regulated hydroelectric business separately from the unregulated hydroelectric business, nor does it have separate targets. OPG stated in reply argument that it considers the efficiency of operations as a business and within regions, which include both regulated and unregulated plants.

While OPG does not calculate TGC/MWh for the regulated hydroelectric facilities, there is no indication in the evidence that the measure cannot be calculated, only that OPG does not currently do so. Given the limited proposed hydroelectric performance reporting, the OEB finds that OPG shall also report on TGC/MWh for the regulated

[177] Tr Vol 9 page 88.
[178] Exh A1-3-2 Attachment 2.

hydroelectric facilities on an annual basis. The OEB understands that at present there is no target, and none is required to be filed.

OPG shall report the five metrics listed in the chart above and TGC/MWh for the regulated hydroelectric business.

The annual hydroelectric reporting shall commence in 2018. In 2018 OPG shall file 2017 hydroelectric performance results, 2017 targets as well as 2018 targets. As noted above, no targets will be filed for TGC/MWh. The hydroelectric performance results for the historical period, 2013-2016, shall also be filed.

All the hydroelectric performance reports shall be filed by April 30th.

10.3 Nuclear Performance Reporting

OPG proposed to annually report on safety, reliability and cost effectiveness of the nuclear business. The 20 measures are those that OPG has included in previous payment amount applications, and are summarized below. OPG proposed to file the prior year's actual performance and the targets for the current year for Darlington and Pickering.

Nuclear Performance Measures (Separate measures will be filed for Darlington and Pickering Stations)	
Category	**Measure**
Safety	All Injury Rate (per 200k hours)
	Collective Radiation Exposure (person rem/unit)
	Airborne Tritium Emissions (curies)
	Industrial Safety Accident Rate (#/200k hours)
	Fuel Reliability Index (microcuries /gram)
	2-year Reactor Trip Rate (#/7000 hours)
	3-year Auxiliary Feedwater System Unavailability (#)
	3-year Emergency AC Power Unavailability (#)
	3-year High Pressure Safety Injection Unavailability
Reliability	Forced Loss Rate (%)
	Unit Capability Factor (%)
	Nuclear Performance Index (%)
	On-line Deficient Maintenance Backlog (work orders / unit)
	On-line Corrective Maintenance Backlog (work orders / unit)
	Chemistry Performance Indicator Annual YTD (#)
Cost Effectiveness	Total Generating Cost per Net MWh ($/MWh)
	Non-Fuel Operating Cost per Net MWh ($/MWh)
	Fuel Cost per Net MWh ($/MWh)
	Capital Cost per MW Design Electrical Rating ($k/MW)
Human Resources	18-month Human Performance Error Rate (#/10k ISAR hours)

OEB staff submitted that the quartile performance for Darlington and Pickering should be filed for all the measures and that the Unit Capability Factor (UCF), Nuclear Performance Index (NPI) and Total Generating Cost (TGC) performance of OPG nuclear should be filed as well. OPG's original proposal was to file UCF and TGC on a normalized basis, i.e. normalized for Darlington production during the DRP. However, following cross-examination, and in its Argument in Chief, OPG now proposes to file both normalized and non-normalized performance.

OEB staff submitted that the targets for the prior year should be filed in addition to the performance for the prior year. OEB staff also submitted that five years of performance results should be filed to be consistent with the Electricity Distributor Scorecards. OPG did not object to these submissions.

Findings

The OEB accepts the OEB staff submission, which has not been opposed by OPG.

OPG shall report the 20 metrics listed in the chart above for Pickering and Darlington separately. For the years which are impacted by DRP, OPG shall report on a normalized and non-normalized basis for Darlington.

OPG shall report UCF, NPI and TGC for OPG Nuclear. For the years which are impacted by DRP, OPG shall report on a normalized and non-normalized basis for OPG Nuclear.

The annual nuclear reporting shall commence in 2018. In 2018 OPG shall file 2017 nuclear performance results, 2017 targets as well as 2018 targets. The nuclear performance results for the historical period, 2013-2016, shall also be filed. The Darlington and OPG performance results would not be normalized for the 2013-2016 period as DRP does not apply for this period.

All the nuclear performance reports shall be filed by April 30th. As reviewed in cross-examination, the performance reports shall be refiled later in the year when the benchmark quartile results are available, no later than November 30th.[179]

[179] Tr Vol 6 page 147.

11 PAYMENT AMOUNT SMOOTHING

Background

In November 2015, O. Reg. 53/05 was amended to include processes and parameters regarding the smoothing of nuclear payment amounts from January 1, 2017 to the end of the DRP. The amended regulation stated that the OEB will determine the portions of the revenue requirement that will be deferred for recovery "with a view to making more stable the year-over-year changes in the payment amount." As noted in section 7 of this Decision, the amended regulation required that a Rate Smoothing Deferral Account (RSDA) be established to record the deferred amounts. The regulation required the nuclear revenue requirement deferral on a five-year basis for the first ten years of the deferral period, and thereafter on a basis to be determined by the OEB. It further stipulated that OPG must record interest on the RSDA balance at the OEB-approved long term debt rate, compounded annually.

The application as originally filed in May 2016 proposed an 11% increase on current base nuclear payment amounts and 11% increases for each year of the test period. With this proposal, OPG forecast that $1.6 billion would be added to the RSDA and that there would be $300 million of interest in 2017-2021. The monthly bill of a typical residential customer would increase $1.05 each year.

O. Reg. 53/05 was amended again in March 2017 "with a view to making more stable the year-over-year changes in the OPG weighted average payment amount" (emphasis added). The amended regulation defined the OPG weighted average payment amount (WAPA) to include both the hydroelectric and nuclear payment amounts, as well as deferral and variance account riders. OPG revised its application in light of the amended regulation and proposed a 2.5% year over year increase in WAPA.[180] With this proposal, OPG forecast that $1.0 billion would be added to the RSDA and that there would be $116 million of interest in 2017-2021.[181] The monthly bill of a typical residential customer would increase $0.65 each year.

OPG provided an evaluation of its proposal considering the following principles:

[180] Impact statement Exh N3-1-1.
[181] Over the entire time horizon of OPG's proposal (i.e. the forecast 10-year deferral period plus the 10-year "recovery period", over which the balance in the RSDA would be recovered), the cumulative interest would amount to $1.4 billion: Tr Vol 22 page 50.

- Financial viability (leverage and cash flow impacts)
- Rate stability
- Long-term perspective
- Post-recovery transition
- Intergenerational equity
- Customer bill impact

OPG stated that its proposal was consistent with O. Reg. 53/05, the objectives of the OEB and the outcomes identified in the Renewed Regulatory Framework.

The following table summarizes the 2016 payment amounts, riders and WAPA, and OPG's proposal for the test period. The final column in the table represents the current payment amounts and WAPA based on the 2017 production forecast.

Table 36: OPG Rate Smoothing Proposal

								Note 1
	Exh N3-1-1	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2017**
1	Hydroelectric Payment Amount ($/MWh)	40.72	41.71	42.33	42.97	43.61	44.27	40.72
2	Hydroelectric Rider ($/MWh)	3.83	1.44	1.44				
3	Hydroelectric Production (TWh)	33.0	33.0	33.0	33.0	33.0	33.0	33.0
4	Nuclear Revenue Requirement ($M)		3161.4	3185.7	3273.2	3783.5	3397.8	
5	Nuclear Production Forecast (TWh)	46.80	38.10	38.47	39.03	37.36	35.38	38.10
6	Unsmoothed Nuclear Payment Amount ($/MWh)	59.29	82.98	82.81	83.86	101.27	96.04	59.29
7	Smoothed Nuclear Payment Amount ($/MWh)	59.29	76.39	78.60	84.83	88.21	92.02	59.29
8	%Change in Smoothed Nuclear Payments		29%	3%	8%	4%	4%	
9	Nuclear Rider ($/MWh)	13.01	2.85	2.85				
10	WAPA (lines 1,2,3,5,7,9) ($/MWh)	60.97	62.49	64.06	65.66	67.30	68.98	50.67
	Source: RRWF, WAPA formula as per O. Reg. 53/05							
	Note 1: 2017 payment amounts for period up to implementation date							

Submissions on Smoothing

Based on an analysis using OPG's proposal, but no additions to the RSDA (i.e. zero smoothing), OEB staff calculated that the monthly bill of a typical residential customer would increase an average of $0.82, instead of $0.65 resulting from OPG's proposal. OEB staff also observed that the bill impact of the unsmoothed scenario is well below the 10% total bill impact threshold that the OEB typically considers requires mitigation, while acknowledging that "[z]ero smoothing is not an option; the regulation requires that the WAPA be made 'more stable'".[182] OEB staff submitted that smoothing of only the 2020 revenue requirement, the year with the largest step change, would achieve the smoothing objectives of O. Reg. 53/05 and would reduce the additions to the RSDA and

[182] OEB staff submission, page 178.

the related carrying charges. Similarly, Energy Probe proposed that the OEB should approve the smallest deferred amount possible.

In March 2017, the Province announced the Fair Hydro Plan, which when implemented would result in electricity bill reductions of 25% for residential customers as well as many small businesses and farms. Bill increases would be limited by the rate of inflation for at least four years.[183] In cross-examination, and in submissions, OEB staff and several intervenors questioned whether significant smoothing of payment amounts was necessary given the pending legislation. OPG replied that, as a matter of law, it would be incorrect to interpret the smoothing provisions of O. Reg. 53/05 differently because of the Fair Hydro Plan.

SEC observed that the change from nuclear payment amount smoothing to WAPA smoothing effectively means the collection of more revenue requirement in the test period. SEC further argued that customers who are not on the Regulated Price Plan (RPP) will not receive the smoothing effects of the Fair Hydro Plan. In addition, while OPG analysis and OEB staff analysis assume payment amounts that transition on January 1, 2017, significant deferral and variance account riders ended on December 31, 2016, and new payment amounts have not been implemented yet. Non-RPP customers currently pay a commodity price that includes the OPG WAPA of $50.67/MWh (note 1 of Table 36 above), which is a decrease from the $60.97 2016 WAPA. Once the 2017 payment amounts are implemented, non-RPP customers could experience a significant increase in commodity price. SEC submitted that there should be no increase in WAPA from 2016 to 2017.

OEB staff submitted that the OEB could smooth WAPA by approving deferral and variance account rider effective dates that are later in the test period. OPG's 2012 year end account balances were disposed in riders over two years, but the disposition was weighted 60:40. OEB staff submitted that this option of smoothing was available in this proceeding as well. SEC observed that there will almost certainly be deferral and variance account riders in the later years of the test period. SEC submitted that the OEB could make assumptions about riders in the later years for the purposes of smoothing, or establish a formula and process to self-adjust when the riders are known. OPG replied that SEC's proposal would complicate future deferral and variance account applications and could limit the OEB's ability to respond in those proceedings.

OPG, OEB staff, CME, LPMA, SEC and VECC all suggested that the OEB not make a decision on smoothing until the payment amount order process when the final revenue requirement, final production forecast, deferral and variance account riders and effective

[183] The *Ontario Fair Hydro Plan Act, 2017* was enacted June 1, 2017.

date are known. OPG submitted that it would be helpful for the OEB to identify principles and parameters in order to focus the range of WAPA smoothing alternatives.

Findings

In section 7, the OEB has approved the Rate Smoothing Deferral Account (RSDA). The OEB agrees that a final decision regarding WAPA smoothing cannot be made until the outcomes of this Decision are reflected in unsmoothed hydroelectric and nuclear payment amounts and hydroelectric and nuclear payment amount riders. Once the unsmoothed payment amounts are known, rate smoothing can be considered.

Although the regulation requires smoothing and sets out certain broad parameters for achieving it, it leaves much of the mechanics of smoothing, including the determination of how much of the nuclear revenue requirement to defer, to the OEB's discretion. Because the parties agree that smoothing should not be determined until the payment amounts order stage, the OEB will not provide detailed directions to OPG concerning those mechanics as part of this Decision. It will be up to OPG to propose a reasonable smoothing approach that is consistent with the regulation. However, the OEB confirms that it agrees that the six guiding principles for smoothing that were identified by OPG are appropriate, subject to the following caveats.

First, although "rate stability" is important, the OEB is of the view that it does not necessarily follow that year over year increases should be constant, as proposed by OPG in its most recent smoothing proposal (a 2.5% annual WAPA increase was proposed). When OPG retools its smoothing approach in light of the revenue requirement and other determinations made in this Decision, it should not consider itself constrained by a straight line increase (although, to be clear, if OPG concludes that a straight line increase would best satisfy the objective of the regulation and the principles of the RRF, it may propose one).

Second, as noted by OEB staff and some intervenors, although much of OPG's application in respect of smoothing – and much of the resulting cross-examination – focused on the bill impacts of various smoothing proposals for residential consumers, it is also critical to consider the impact on other classes of consumers, some of whom will not see the same reductions under the Fair Hydro Plan. "Rate shock" in the first year of the test period should be avoided.

As noted in section 12, Implementation, the OEB has decided that the effective date for payment amounts will be June 1, 2017. The final implementation date will be subject to the completion of the payment amount order process set out below in the Order section. However, for efficiency, the draft payment amounts order shall include the following implementation date scenarios:

- March 1, 2018
- April 1, 2018
- May 1, 2018

OPG shall propose smoothing for each scenario including WAPA, bill impacts, deferred amounts and RSDA carrying charges. OPG shall determine forgone revenue riders for each scenario. In the normal course, the OEB establishes the recovery period for forgone revenue. As legislatively required smoothing is a unique feature of this proceeding. OPG shall propose a recovery period for forgone revenue in the draft payment amounts order. Similarly, OPG shall propose a recovery period for the disposition of the deferral and variance account balances approved in section 7 of this Decision. It would be helpful to include an analysis of customer bill impacts, and in that regard, OPG might consider including an updated version of its response to undertaking J20.1 which set out the bill impacts for medium and large businesses (which will not see the same smoothing effects of the Fair Hydro Plan that residential and other eligible consumers will see).

12 IMPLEMENTATION

OPG seeks approval for nuclear payment amounts to be effective January 1, 2017 and for each following year through to December 31, 2021. OPG seeks approval for hydroelectric payment amounts to be effective January 1, 2017 to December 31, 2017 and approval of the formula used to set the hydroelectric payment amounts for the period January 1, 2017 to December 31, 2021. The OEB issued an order on December 8, 2016, declaring the current nuclear and regulated hydroelectric payment amounts interim effective January 1, 2017.

A January 1, 2017 effective date for new payment amounts was supported by OEB staff and the Society. OEB staff submitted that the application was filed on May 27, 2016, shortly after 2015 audited results were available, and that OPG met the schedule set out in Procedural Order No. 1.

SEC, LPMA, CCC and VECC submitted that the effective date should be the first day of the month following the issue of the payment amounts order. The intervenors argued that OPG should have filed this complex application earlier in order for the OEB to approve a January 1, 2017 effective date. The intervenors noted that the time between filing and payment amounts order for the previous proceeding, EB-2013-0321, was 447 days. The intervenors also referred to the EB-2013-0321 decision in which the OEB did not approve the requested January 1, 2014 effective date. In that decision the OEB stated that its general practice is for final rates to become effective at the conclusion of the proceeding, and that this practice is predicated on a forecast test year.

OPG replied that the intervenors' references to the EB-2013-0321 filing date are misplaced as the application started as an incomplete filing. OPG argued that an earlier filing in this proceeding would have required large scale updates to the application. An earlier filing would not have included audited 2015 results and would not have reflected the release quality estimate for DRP, the final business case for PEO, the amended Bruce Lease agreement or the amendment to O. Reg. 53/05. OPG submitted that it struck an appropriate balance between providing the best available information and the proposed effective date.

In response to cross-examination by SEC, OPG filed undertaking J23.1 which provides the impact of the scenario should the OEB approve an effective date of September 1, 2017. OPG would collect the interim payment amounts until August 31, 2017 and would begin collecting payment amounts and riders approved by the EB-2016-0152 decision beginning on September 1, 2017. The undertaking response assumed that the OEB approved the full year revenue requirement, and OPG would record in the RSDA the difference between the interim and approved payment amounts on a WAPA basis for

the period January 1 to August 31, 2017. SEC argued that the OEB should refuse to allow this interpretation of O. Reg. 53/05. OEB staff submitted that the purpose of the RSDA is to allow for the smoothing that the OEB determines, and that the RSDA does not relate to effective date.

As a solution, SEC submitted that the OEB could determine that the revenue requirement for the period January 1, 2017 to the effective date is equivalent to that resulting from current payment amounts.

OPG replied that its position is based on section 5.5 of O. Reg. 53/05 which clearly provides that the RSDA will record entries starting January 1, 2017.

As noted in the deferral and variance account section, and the smoothing section, OPG seeks disposition of 2015 year-end account balances using two year payment amounts riders commencing January 1, 2017. OEB staff submitted that the OEB could consider a later start date.

Findings

The OEB approves an effective date of June 1, 2017. OPG filed a substantial application on May 27, 2016, as well as three impact statements, the last on March 8, 2017. It is unrealistic of OPG to expect that a final decision would be rendered and a payment amounts order processed in time for January 1, 2017 payment amounts. OPG filed a complicated application which was comprised of a Custom IR application for its nuclear facilities, an IRM application for its regulated hydroelectric facilities, a review of DRP and consideration of PEO. OPG should have known that it would take more than seven months for the OEB to consider the application, render a decision and finalize a payment amounts order.

OPG submits that it struck a balance between filing current information and taking into account the time required for the processing of an application. Specifically OPG notes that if it had filed prior to May 27, 2016, it would not have been able to include audited 2015 results, the release quality estimate for DRP, the final business case for PEO, the amended Bruce Lease agreement or the amendment to O. Reg. 53/05. The OEB notes that the completion of some of these items was largely in the control of OPG. Knowing that it was filing a major payment amounts application, OPG could have taken steps to ensure that the inclusion of these elements in the application was possible. The OEB also notes that OPG filed three significant updates after the application was filed (two of which were under OPG’s control). The fact that OPG filed significant updates runs counter to OPG’s argument that it filed in May 2016 with a view to minimizing updates to the application.

It is the common practice of the OEB to establish new rates and payment amounts prospectively. However, as this has been a complicated case involving a lengthy submission and decision writing process, the OEB has decided it will not make payment amounts effective after this Decision is rendered.

The smoothing of payment amounts, as required by regulation, will help lessen some of the impact of the payment amounts on ratepayers during the test period. However, it will not totally alleviate the fact that ratepayers will have consumed power for the last seven months of 2017 (and for a period into 2018) at the existing rates and will now, after the fact, have to pay a new rate for those periods.

In arriving at the June 1, 2017 effective date, the OEB has attempted to balance the revenue requirement needs of OPG and rate certainty expected by ratepayers.

The OEB finds that the new smoothing requirement in the regulation does not require that the OEB approve an effective date as of January 1, 2017. To do so would run contrary to the OEB's mandate to set just and reasonable payment amounts. Smoothing is a mechanism used to minimize the impact of changes in payment amounts and how they will be collected from ratepayers. It does not affect the OEB's mandate to set the payment amounts, one aspect of which is to determine the effective date of new payment amounts. The regulation may state that smoothing take place over the entire period of the five-year term, but the OEB does not read the regulation to state that the new payment amounts must commence effective January 1, 2017 in order for that to occur. Had the regulation intended to require an effective date of January 1, 2017, it could have simply said so. The total 2017 rates will still be used to calculate smoothing – they will be based on five months at the old rates and seven months at the new rates.

Given the passage of time, in addition to the 2017 payment amounts, the OEB will be finalizing the hydroelectric payment amounts for 2018.

OPG shall file a draft payment amounts order reflecting the payment amount setting determinations in this Decision for nuclear based on the parameters established for the five-year term, and for hydroelectric based on the 2017 and 2018 parameters. Similar to its approach in its application, OPG may use appropriate assumptions for hydroelectric payment amounts for years three to five of the term for purposes of establishing the WAPA.

The draft payment amounts order will include the final revenue requirement and final production forecast for the nuclear facilities, and the final hydroelectric rate setting mechanism and 2017 and 2018 parameters, as reflected in the findings made by the OEB in this Decision. OPG shall include supporting schedules and a clear explanation

of all the calculations and assumptions used in deriving the amounts used, and final unsmoothed payment amounts.

A revised Revenue Requirement Work Form shall be filed that reflects both the application and the OEB Decision.

The draft payment amounts order shall reflect all the implementation date scenarios described in section 11, Payment Amount Smoothing.

With regard to the calculation of the forgone revenue rider for the period starting June 1, 2017 to the implementation date, the nuclear forgone revenue should be based on the monthly forecast production underpinning the application and approved by the OEB. The hydroelectric forgone revenue shall be based on pro-rating the 2015 actual regulated hydroelectric production.

OPG is directed to provide a full description of each deferral and variance account as part of the draft payment amounts order. Accounting orders shall be filed for the new accounts approved in this Decision.

The schedule for the filing of the draft payment amounts order – and for submissions on the draft – is set out below in the Order section.

It is the OEB's expectation that OPG will file an application comprising the disposition of the next set of deferral and variance accounts, including OPG's proposal for the Pension and OPEB Cash vs. Accrual Differential account (that will address with detailed evidence OPG's proposal for the accounting method to be used going forward), at the same time as the implementation of the 2019 hydroelectric payment amounts.

The OEB will set out the process for cost claims for intervenor costs since May 30, 2017 in the final payment amounts order.

13 ORDER

THE ONTARIO ENERGY BOARD ORDERS THAT:

1. OPG shall file with the OEB, with a copy to the intervenors, a draft payment amounts order (including a smoothing proposal) that reflects the OEB's findings in this Decision and Order by **January 17, 2018**.

2. Intervenors and OEB staff shall file with the OEB, with a copy to OPG, any comments on the draft payment amounts order (including the smoothing proposal) by **January 26, 2018**.

3. OPG shall file with the OEB, with a copy to the intervenors, a response to any comments by **February 5, 2018**.

4. OPG shall comply with all reporting and filing requirements set out in this Decision and Order.

All filings to the OEB must quote the file number, EB-2016-0152 and be made electronically through the OEB's web portal at http://www.pes.ontarioenergyboard.ca/eservice/ in searchable/unrestricted PDF format. Two paper copies must also be filed at the OEB's address provided below. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at https://www.oeb.ca/oeb/_Documents/e-Filing/RESS_Document_Guidelines_final.pdf. If the web portal is not available parties may email their documents to the address below. Those who do not have internet access are required to submit all filings on a USB flash drive in PDF format, along with two paper copies. Those who do not have computer access are required to file seven paper copies.

All communications should be directed to the attention of the Board Secretary at the address below, and be received no later than 4:45 p.m. on the required date.

ADDRESS

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4
Attention: Board Secretary

E-mail: boardsec@oeb.ca
Tel: 1-888-632-6273 (Toll free)
Fax: 416-440-7656

DATED at Toronto December 28, 2017

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

SCHEDULE A

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

Excerpt: Section 78.1 of the *Ontario Energy Board Act, 1998,* S.O. 1998, c.15 (Schedule B)

Payments to prescribed generator

78.1 (1) The IESO shall make payments to a generator prescribed by the regulations with respect to output that is generated by a unit at a generation facility prescribed by the regulations. 2014, c. 7, Sched. 23, s. 7.

Payment amount

(2) Each payment referred to in subsection (1) shall be the amount determined in accordance with the order of the Board then in effect. 2014, c. 7, Sched. 23, s. 7.

Same, limitation re Ontario Power Generation Inc.

(3) The determination of a payment to Ontario Power Generation Inc. under this section shall not include any consideration of amounts related to activities of Ontario Power Generation Inc. carried out in relation to the *Ontario Fair Hydro Plan Act, 2017*. 2017, c. 16, Sched. 1, s. 44 (3).

Same

(3.1) The amounts referred to in subsection (3) include, without limitation, the following:

1. Amounts related to the appointment of Ontario Power Generation Inc. as the Financial Services Manager under the *Ontario Fair Hydro Plan Act, 2017*.
2. Amounts related to the charging of fees for performing duties as the Financial Services Manager.
3. Amounts related to exercising the powers and performing the duties of the Financial Services Manager.
4. Amounts related to the consolidation of the assets and liabilities for accounting purposes of any special purpose financing entities established under and for the purposes of that Act. 2017, c. 16, Sched. 1, s. 44 (3).

Board orders

(4) The Board shall make an order under this section in accordance with the rules prescribed by the regulations and may include in the order conditions, classifications or practices, including rules respecting the calculation of the amount of the payment. 2004, c. 23, Sched. B, s. 15.

Fixing other prices

(5) The Board may fix such other payment amounts as it finds to be just and reasonable,

(a) on an application for an order under this section, if the Board is not satisfied that the amount applied for is just and reasonable; or

(b) at any other time, if the Board is not satisfied that the current payment amount is just and reasonable. 2004, c. 23, Sched. B, s. 15.

Burden of proof

(6) Subject to subsection (7), the burden of proof is on the applicant in an application made under this section. 2004, c. 23, Sched. B, s. 15.

Order

(7) If the Board on its own motion or at the request of the Minister commences a proceeding to determine whether an amount that the Board may approve or fix under this section is just and reasonable,

(a) the burden of establishing that the amount is just and reasonable is on the generator; and

(b) the Board shall make an order approving or fixing an amount that is just and reasonable. 2004, c. 23, Sched. B, s. 15.

Application

(8) Subsections (4), (5) and (7) apply only on and after the day prescribed by the regulations for the purposes of subsection (2). 2004, c. 23, Sched. B, s. 15.

Section Amendments with date in force (d/m/y)

2004, c. 23, Sched. B, s. 15 - 01/01/2005

2014, c. 7, Sched. 23, s. 7 - 01/01/2015

2017, c. 16, Sched. 1, s. 44 (3) - 01/06/2017

SCHEDULE B

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

Ontario Energy Board Act, 1998
Loi de 1998 sur la Commission de l'énergie de l'Ontario

ONTARIO REGULATION 53/05
PAYMENTS UNDER SECTION 78.1 OF THE ACT

Consolidation Period: From March 2, 2017 to the e-Laws currency date.

Last amendment: O. Reg. 57/17.

This Regulation is made in English only.

Definition

0.1 (1) In this Regulation,

"approved reference plan" means a reference plan, as defined in the Ontario Nuclear Funds Agreement, that has been approved by Her Majesty the Queen in right of Ontario in accordance with that agreement;

"calculation period" means each period for which the Board determines the approved revenue requirements under subparagraph 12 ii of subsection 6 (2) together with the year immediately prior to that period;

"Darlington Refurbishment Project" means the work undertaken by Ontario Power Generation Inc. in respect of the refurbishment, in whole or in part, of some or all of the generating units of the Darlington Nuclear Generating Station;

"deferral period" means the period beginning on January 1, 2017, and ending when the Darlington Refurbishment Project ends;

"hydroelectric facilities" means the hydroelectric generation facilities prescribed in paragraphs 1, 2 and 6 of section 2;

"nuclear decommissioning liability" means the liability of Ontario Power Generation Inc. for decommissioning its nuclear generation facilities and the management of its nuclear waste and used fuel;

"nuclear facilities" means the nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2;

"Ontario Nuclear Funds Agreement" means the agreement entered into as of April 1, 1999 by Her Majesty the Queen in right of Ontario, Ontario Power Generation Inc. and certain subsidiaries of Ontario Power Generation Inc., including any amendments to the agreement.

"OPG weighted average payment amount" for a year means the total production-weighted average payment amount that is used in the determination of the payments made under section 78.1 of the Act with respect to the generation facilities prescribed in section 2 of this Regulation, calculated according to the formula:

$$(((NPA + NPR) \times NPF) + (HPA + HPR) \times HPF) / (NPF + HPF)$$

where,

NPA is the Board-approved payment amount for the year in respect of the nuclear facilities,

NPR is the Board-approved payment amount rider for the year in respect of the recovery of balances recorded in the deferral accounts and variance accounts established for the nuclear facilities, excluding the deferral account established under subsection 5.5 (1),

NPF is the Board-approved production forecast for the nuclear facilities for the year,

HPA is the Board-approved payment amount for the year, or the expected payment amount resulting from a Board-approved rate-setting formula, as applicable, in respect of the hydroelectric facilities,

HPR is the Board-approved payment amount rider for the year in respect of the recovery of balances recorded in the deferral accounts and variance accounts established for the hydroelectric facilities, and

HPF is the Board-approved production forecast for the hydroelectric facilities for the year.

O. Reg. 23/07, s. 1; O. Reg. 353/15, s. 1; O. Reg. 57/17, s. 1.

(2) For the purposes of this Regulation, the output of a generation facility shall be measured at the facility's delivery points, as determined in accordance with the market rules. O. Reg. 312/13. s. 1.

Prescribed generator

1. Ontario Power Generation Inc. is prescribed as a generator for the purposes of section 78.1 of the Act. O. Reg. 53/05, s. 1.

Prescribed generation facilities

2. The following generation facilities of Ontario Power Generation Inc. are prescribed for the purposes of section 78.1 of the Act:

1. The following hydroelectric generating stations located in The Regional Municipality of Niagara:
    i. Sir Adam Beck I.
    ii. Sir Adam Beck II.
    iii. Sir Adam Beck Pump Generating Station.
    iv. De Cew Falls I.
    v. De Cew Falls II.
2. The R. H. Saunders hydroelectric generating station on the St. Lawrence River.
3. Pickering A Nuclear Generating Station.
4. Pickering B Nuclear Generating Station.
5. Darlington Nuclear Generating Station.
6. As of July 1, 2014, the generation facilities of Ontario Power Generation Inc. that are set out in the Schedule. O. Reg. 53/05, s. 2; O. Reg. 23/07, s. 2; O. Reg. 312/13, s. 2.

Prescribed date for s. 78.1 (2) of the Act

3. April 1, 2008 is prescribed for the purposes of subsection 78.1 (2) of the Act. O. Reg. 53/05, s. 3.

4. REVOKED: O. Reg. 312/13, s. 3.

Deferral and variance accounts

5. (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records capital and non-capital costs incurred and revenues earned or foregone on or after April 1, 2005 due to deviations from the forecasts as set out in the document titled "Forecast Information (as of Q3/2004) for Facilities Prescribed under Ontario Regulation 53/05" posted and available on the Ontario Energy Board website, that are associated with,

(a) differences in hydroelectric electricity production due to differences between forecast and actual water conditions;

(b) unforeseen changes to nuclear regulatory requirements or unforeseen technological changes which directly affect the nuclear generation facilities, excluding revenue requirement impacts described in subsections 5.1 (1) and 5.2 (1);

(c) changes to revenues for ancillary services from the generation facilities prescribed under section 2;

(d) acts of God, including severe weather events; and

(e) transmission outages and transmission restrictions that are not otherwise compensated for through congestion management settlement credits under the market rules. O. Reg. 23/07, s. 3.

(2) The calculation of revenues earned or foregone due to changes in electricity production associated with clauses (1) (a), (b), (d) and (e) shall be based on the following prices:

1. $33.00 per megawatt hour from hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2.
2. $49.50 per megawatt hour from nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2. O. Reg. 23/07, s. 3.

(3) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually. O. Reg. 23/07, s. 3.

(4) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records non-capital costs incurred on or after January 1, 2005 that are associated with the planned return to service of all units at the Pickering A Nuclear Generating Station, including those units which the board of directors of Ontario Power Generation Inc. has determined should be placed in safe storage. O. Reg. 23/07, s. 3.

(5) For the purposes of subsection (4), the non-capital costs include, but are not restricted to,

(a) construction costs, assessment costs, pre-engineering costs, project completion costs and demobilization costs; and

(b) interest costs, recorded as simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually. O. Reg. 23/07, s. 3.

5.1 REVOKED: O. Reg. 312/13, s. 3.

Nuclear liability deferral account

5.2 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under 78.1 of the Act, the revenue requirement impact of changes in its total nuclear decommissioning liability between,

(a) the liability arising from the approved reference plan incorporated into the Board's most recent order under section 78.1 of the Act; and

(b) the liability arising from the current approved reference plan. O. Reg. 23/07, s. 3.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 23/07, s. 3.

5.3 REVOKED: O. Reg. 312/13, s. 3.

Nuclear development variance account

5.4 (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under section 78.1 of the Act, differences between actual non-capital costs incurred and firm financial commitments made and the amount included in payments made under that section for planning and preparation for the development of proposed new nuclear generation facilities. O. Reg. 27/08, s. 1.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 27/08, s. 1.

Darlington refurbishment rate smoothing deferral account

5.5 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the commencement of the deferral period, the difference between,

(a) the revenue requirement amount approved by the Board that, but for subparagraph 12 i of subsection 6 (2) of this Regulation, would have been used in connection with determining the payments to be made under section 78.1 of the Act each year during the deferral period in respect of the nuclear facilities; and

(b) the portion of the revenue requirement amount referred to in clause (a) that is used in connection with determining the payments made under section 78.1 of the Act, after determining, under subparagraph 12 i of subsection 6 (2) of this Regulation, the amount of the revenue requirement to be deferred for that year in respect of the nuclear facilities. O. Reg. 353/15, s. 2.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account at a long-term debt rate reflecting Ontario Power Generation Inc.'s cost of long-term borrowing that is determined or approved by the Board from time to time, compounded annually. O. Reg. 353/15, s. 2.

Rules governing determination of payment amounts by Board

6. (1) Subject to subsection (2), the Board may establish the form, methodology, assumptions and calculations used in making an order that determines payment amounts for the purpose of section 78.1 of the Act. O. Reg. 53/05, s. 6 (1).

(2) The following rules apply to the making of an order by the Board that determines payment amounts for the purpose of section 78.1 of the Act:

1. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the variance account established under subsection 5 (1) over a period not to exceed three years, to the extent that the Board is satisfied that,
   i. the revenues recorded in the account were earned or foregone and the costs were prudently incurred, and
   ii. the revenues and costs are accurately recorded in the account.
2. In setting payment amounts for the assets prescribed under section 2, the Board shall not adopt any methodologies, assumptions or calculations that are based upon the contracting for all or any portion of the output of those assets.
3. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the deferral account established under subsection 5 (4). The Board shall authorize recovery of the balance on a straight line basis over a period not to exceed 15 years.
4. The Board shall ensure that Ontario Power Generation Inc. recovers capital and non-capital costs and firm financial commitments incurred in respect of the Darlington Refurbishment Project or incurred to increase the output of, refurbish

or add operating capacity to a generation facility referred to in section 2, including, but not limited to, assessment costs and pre-engineering costs and commitments,

i. if the costs and financial commitments were within the project budgets approved for that purpose by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., or

ii. if the costs and financial commitments were not approved by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., if the Board is satisfied that the costs were prudently incurred and that the financial commitments were prudently made.

4.1 The Board shall ensure that Ontario Power Generation Inc. recovers the costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities, to the extent the Board is satisfied that,

i. the costs were prudently incurred, and

ii. the financial commitments were prudently made.

5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:

i. Ontario Power Generation Inc.'s assets and liabilities, other than the variance account referred to in subsection 5 (1), which shall be determined in accordance with paragraph 1.

ii. Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations.

iii. Ontario Power Generation Inc.'s costs with respect to the Bruce Nuclear Generating Stations.

6. Without limiting the generality of paragraph 5, that paragraph applies to values relating to,

i. capital cost allowances,

ii. the revenue requirement impact of accounting and tax policy decisions, and

iii. capital and non-capital costs and firm financial commitments to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2.

7. The Board shall ensure that the balance recorded in the deferral account established under subsection 5.2 (1) is recovered on a straight line basis over a period not to exceed three years, to the extent that the Board is satisfied that revenue requirement impacts are accurately recorded in the account, based on the following items, as reflected in the audited financial statements approved by the board of directors of Ontario Power Generation Inc.,

i. return on rate base,

ii. depreciation expense,

iii. income and capital taxes, and

iv. fuel expense.

7.1 The Board shall ensure the balance recorded in the variance account established under subsection 5.4 (1) is recovered on a straight line basis over a period not to exceed three years, to the extent the Board is satisfied that,

i. the costs were prudently incurred, and

ii. the financial commitments were prudently made.

8. The Board shall ensure that Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan.

9. The Board shall ensure that Ontario Power Generation Inc. recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations.

10. If Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations exceed the costs Ontario Power Generation Inc. incurs with respect to those Stations, the excess shall be applied to reduce the amount of the payments required under subsection 78.1 (1) of the Act with respect to output from the nuclear generation facilities referred to in paragraphs 3, 4 and 5 of section 2.

11. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc. that is effective on or after July 1, 2014, the following rules apply:

i. The order shall provide for the payment of amounts with respect to output that is generated at a generation facility referred to in paragraph 6 of section 2 during the period from July 1, 2014 to the day before the effective date of the order.

ii. The Board shall accept the values for the assets and liabilities of the generation facilities referred to in paragraph 6 of section 2 as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors before the making of that order. This includes values relating to the income tax effects of timing differences and the revenue requirement impact of accounting and tax policy decisions reflected in those financial statements.

12. For the purposes of section 78.1 of the Act, in setting payment amounts for the nuclear facilities during the deferral period,

i. the Board shall determine the portion of the Board-approved revenue requirement for the nuclear facilities for each year that is to be recorded in the deferral account established under subsection 5.5 (1), with a view to making more stable the year-over-year changes in the OPG weighted average payment amount over each calculation period,

ii. the Board shall determine the approved revenue requirements referred to in subsection 5.5 (1) and the amount of the approved revenue requirements to be deferred under subparagraph i on a five-year basis for the first 10 years of the deferral period and, thereafter, on such periodic basis as the Board determines,

iii. for greater certainty, the Board's determination of Ontario Power Generation Inc.'s approved revenue requirement for the nuclear facilities shall not be restricted by the yearly changes in payment amounts in subparagraph i,

iv. the Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the deferral account established under subsection 5.5 (1), and the Board shall authorize recovery of the balance on a straight line basis over a period not to exceed 10 years commencing at the end of the deferral period, and

v. the Board shall accept the need for the Darlington Refurbishment Project in light of the Plan of the Ministry of Energy known as the 2013 Long-Term Energy Plan and the related policy of the Minister endorsing the need for nuclear refurbishment. O. Reg. 23/07, s. 4; O. Reg. 27/08, s. 2; O. Reg. 312/13, s. 4; O. Reg. 353/15, s. 3; O. Reg. 57/17, s. 2.

7. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 53/05, s. 7.

SCHEDULE

1. Abitibi Canyon.
2. Alexander.
3. Aquasabon.
4. Arnprior.
5. Auburn.
6. Barrett Chute.
7. Big Chute.
8. Big Eddy.
9. Bingham Chute.
10. Calabogie.
11. Cameron Falls.
12. Caribou Falls.
13. Chats Falls.
14. Chenaux.
15. Coniston.
16. Crystal Falls.
17. Des Joachims.
18. Elliott Chute.
19. Eugenia Falls.
20. Frankford.

21. Hagues Reach.
22. Hanna Chute.
23. High Falls.
24. Indian Chute.
25. Kakabeka Falls.
26. Lakefield.
27. Lower Notch.
28. Manitou Falls.
29. Matabitchuan.
30. McVittie.
31. Merrickville.
32. Meyersberg.
33. Mountain Chute.
34. Nipissing.
35. Otter Rapid.
36. Otto Holden.
37. Pine Portage.
38. Ragged Rapids.
39. Ranney Falls.
40. Seymour.
41. Sidney.
42. Sills Island.
43. Silver Falls.
44. South Falls.
45. Stewartville.
46. Stinson.
47. Trethewey Falls.
48. Whitedog Falls.

O. Reg. 312/13, s. 5.

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SCHEDULE C

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

MEMORANDUM OF AGREEMENT

BETWEEN
Her Majesty the Queen in right of Ontario, as represented by the Minister of Energy (the "Shareholder" or "Minister")
And
Ontario Power Generation, Inc. ("OPG")

MEMORANDUM OF AGREEMENT

BETWEEN
Her Majesty the Queen in right of Ontario as represented by the Minister of Energy (the "Shareholder" or "Minister")
And
Ontario Power Generation, Inc. ("OPG") or the "Corporation"

WHEREAS OPG is a business corporation incorporated under the *Business Corporations Act* (Ontario) OBCA).

AND WHEREAS The Minister, on behalf of Her Majesty in right of Ontario, may acquire and hold shares of OPG, and has primary policy responsibility for the overall legislative and regulatory framework, established primarily under the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998,* and the applicable regulations, within which OPG must conduct its business operations .

NOW THEREFORE the parties hereto have agreed as follows.

1 DEFINITIONS/INTERPRETATION

1.1 The following terms shall have the meanings ascribed to them herein:

"Corporation" means "Ontario Power Generation Inc."

"EA" means the "*Electricity Act, 1998*" and its regulations and the phrase "the Act" has a corresponding meaning.

"Deputy Minister" means the Deputy Minister of Energy, a public servant appointed by the Lieutenant Governor in Council under the auspices of section 4 of the *Ministry of Energy Act, 2011;*

"Ministry" means the Ministry of Energy;

"Minister" means the Minister of Energy appointed by the Lieutenant Governor in Council under the auspices of the *Executive Council Act* (Ontario) and includes reference to such other member of the Executive Council as may be assigned the administration of the *Ministry of Energy Act, 2011* (Ontario) under the *Executive Council Act* (Ontario);

"MOA" means this Memorandum of Agreement, including any and all appendixes attached hereto;

"OBCA" means *Business Corporations Act* (Ontario);

"OEBA" means the *Ontario Energy Board Act, 1998* and its regulations, codes, or orders of the Ontario Energy Board, as applicable;

"OPG Board Chair" means the member of the Corporation's Board of Directors which is appointed by the Minister pursuant to a unanimous shareholder resolution made in writing, and who is designated by the Minister as Chair;

"Shareholder" means Her Majesty the Queen, in Right of the Province of Ontario, as represented by the Minister of Energy who holds all of the issued shares of the Corporation on behalf of the Crown, and "sole shareholder" shall have the same meaning.

2. PURPOSE OF THIS MEMORANDUM OF AGREEMENT

The parties hereto agree and acknowledge that the purpose of this MOA is as set out below:

2.1 To serve as the basis of agreement between OPG and its sole Shareholder on mandate, governance, performance, and communications of OPG.

2.2 To establish the accountabilities and relationships solely between OPG and the Shareholder. In its discretion, the Shareholder may waive or deem compliance of OPG's obligations as appropriate in the circumstances.

2.3 To promote a positive and co-operative working relationship between OPG and the Shareholder.

3 GOVERNANCE OF OPG

3.1 Under the OBCA, the OPG Board of Directors is responsible for supervising the management of the business affairs and operations of the Corporation, including a fiduciary duty to act honestly and in good faith with a view to the best interests of the Corporation and to exercise the skill as well as a standard of care and diligence that a reasonably prudent person would exercise in similar circumstances. As such, the Corporation operates as a business enterprise with a commercial mandate, governed in principle and at first instance by an independent Board of Directors who is responsible for the appointment of the President and Chief Executive Officer. The President and Chief Executive Officer and management are responsible for the day-to-day operations of the company.

3.2 The Minister shall be responsible for appointing or re-appointing, in a timely manner and following consultation with the Chair, as appropriate, the directors of OPG pursuant to the process established by the Public Appointments Secretariat and securities regulators' National Policy on Corporate Governance Guidelines.

3.3 As a reporting issuer of debt securities, OPG is subject to the disclosure standards and requirements of the *Securities Act* (Ontario) and shall make such disclosures as may be required.

3.4 As set out in subsection 53.1(2) of the EA, OPG and its subsidiaries are not agents of the Crown for any purpose, despite the Crown Agency Act.

3.5 OPG shall operate in an accountable and transparent manner with regard to the Corporation's governance, management, administration and operations. In this regard, OPG is subject to a number of statutes and Treasury Board/Management Board of Cabinet directives. A list of applicable statutes and directives is set out in Appendix 1 attached hereto.

3.6 Notwithstanding the foregoing, the Shareholder may at times direct OPG to undertake special initiatives. Such directives shall be written declarations by way of a Unanimous Shareholder

Agreement and/or Declarations and resolutions, in accordance with section 108 of the OBCA, which shall be made public by OPG within a reasonable timeframe by publishing such agreements, declarations and resolutions on the Corporation's website.

3.7 Unless otherwise directed by the Shareholder or statute, OPG shall operate in Ontario in accordance with the highest corporate standards, including but not limited to the highest corporate standards in the areas of corporate governance and social responsibility. OPG shall continue to benchmark its corporate governance practices against the securities regulators' National Policy on Corporate Governance Guidelines, as well as other leading governance organizations, as appropriate.

4 MANDATE

4.1 The objects of OPG include, in addition to any other objects, owning and operating a diversified portfolio of generation assets and facilities.

4.2 OPG shall leverage its assets and expertise to generate new revenues on a commercially sound basis, including the making of strategic investments and acquisitions in the electricity sector, as well as in related business opportunities inside and outside Ontario, on its own or in partnership as appropriate, for the benefit of the Corporation and the Shareholder.

4.3 OPG shall continue to operate as a respected, publicly-owned electricity generation enterprise and to operate its assets efficiently and cost-effectively, and to deliver value both to Ontario's ratepayers and taxpayers.

4.4 OPG shall ensure that it conducts its operations in full compliance with all laws and regulations and serves as a model in regard to public and employee safety, environmental practices, corporate citizenship, community engagement and First Nations and Métis relations.

4.5 OPG shall undertake generation development projects in support of the Province's electricity planning initiatives, including the Long Term Energy Plan, as may be updated from time to time.

4.6 OPG shall support the Province of Ontario's efforts to fulfill the Crown's constitutional duty to consult and accommodate Aboriginal peoples, where that duty arises in relation to OPG generation projects, by carrying out those procedural aspects of the Crown's consultation obligations that are delegated in writing to OPG by the Province, including the Ministry.

4.7 The Province of Ontario and the Ministry supports the role of public power and mitigating electricity prices in Ontario and in doing so:

a. mandates that OPG maintain itself as a strong, viable public power component of the electricity sector at an appropriate scale and with generation portfolio diversity to ensure long-term operational and financial sustainability and to support OPG long term liabilities; and
b. mandates that OPG plan and operate its generation facilities based upon good utility practice recognizing safety, legal, regulatory, environmental and market factors.

4.8 OPG shall support the Province's economic development objectives where feasible, including generating financial benefits that remain within the Province of Ontario.

4.9 OPG shall serve the public interest and operate in a way that achieves a commercial rate of return, moderates overall electricity prices, and supports the efficient operation of the electricity market.

4.10 OPG shall earn a commercial rate of return and generate sufficient cash in order to maintain an investment grade credit rating, and service its borrowing needs for operations and projects; as well as supporting the opportunity to access public debt markets in the future. Any significant new generation approved by the Board of Directors and agreed to by the Shareholder may receive financial support from the Province of Ontario, if and as appropriate.

4.11 Subject to any unanimous shareholder declaration or resolution, OPG shall be permitted to participate in all energy-related procurements in Ontario.

4.12 OPG shall inform the Shareholder of any solar and wind developments or projects that the Corporation intends to undertake or assume, including the sources of the Corporation's financing, before undertaking or assuming such developments or projects.

4.13 Where appropriate, OPG shall pursue prospective generation related developments with First Nations and Métis communities that can provide the basis for long term mutually beneficial commercial arrangements.

4.14 Acknowledging sections 3.1 and 3.4 of this MOA, OPG will act in the interests of both OPG and the Shareholder in entering into potential settlements of material Aboriginal claims or grievances or material arrangements with communities potentially affected by OPG generation development. Unless otherwise agreed to with the Shareholder, OPG will pursue such agreements or arrangements so that the Shareholder benefits equally from releases from liability and indemnifications obtained by OPG in relation to damage caused by the construction, operation and development of OPG facilities. Nothing in this MOA will require OPG to pursue releases for matters for which the Shareholder may be solely liable.

5 REPORTING REQUIREMENTS

5.1 OPG and the Shareholder will ensure timely sharing of information sharing on major developments and issues that may impact the business of OPG or the interests of the Shareholder. Major developments and issues include planned acquisition of energy assets and/or assumption of existing power supply contracts, proposed settlements of material Aboriginal peoples' claims or grievances relating to OPG facilities, and proposed arrangements with communities affected by OPG generation development.

5.2 OPG shall report to the Shareholder, on an immediate basis, where a material human safety or system reliability issue arises.

5.3 Every year OPG shall develop and submit a rolling 3-5 year business plan to the Shareholder for review and concurrence.

a. Once approved by OPG's Board of Directors, OPG's annual business plan will be submitted to the Minister for concurrence.

b. The annual business plan shall include 3 -5 year performance targets based on operating and financial results as well as major project execution. It shall also include a 3 - 5 year investment plan for new projects.

c. OPG shall include objectives for operational efficiency improvements in its business plan.

d. Staff from the Ministry will review OPG's annual business plan in a timely manner.

e. The Deputy Minister shall advise and assist the Minister on any responsibilities associated with the approval of OPG's annual business plan.

f. OPG shall respond to any comments or requests for further information on the annual business plan, made by the Minister, Deputy Minister or Ministry staff in a timely manner.

g. Concurrence will be subject to the appearance of OPG's business plan before Treasury Board.

5.4 Within 90 days after the end of each fiscal year, as required by subsection of 53.4 (1) of the EA, OPG shall submit to the Minister an annual report on its affairs during that fiscal year.

a. In a timely manner in advance of the submission of the annual report to the Minister, OPG will provide a draft copy of the annual report for Ministry staff to review.

b. Ministry staff will review the draft annual report in a timely manner, and may request additional information from OPG, as necessary.

5.5 OPG shall provide, in a timely manner, quarterly and year-end financial reports for the Ministry's review prior to filing with the OSC, and in particular:

a. year-end financials, which include News Release, MD&A and Audited Financial Statements whose content is prescribed by the securities regulators' National Instrument 51-102; and,

b. the Annual Information Form and Statement of Executive Compensation, whose content is prescribed by securities regulators' National Instrument NI 51-102.

5.6 OPG shall provide briefings to senior officials of the Ministry on OPG's operational and financial performance against plan.

5.7 OPG shall provide reports and information to the Ministry of Finance, as required, from time to time, as per subsection 53.4 (4) of the EA. Reports and information requests from the Ministry of Finance shall be made through the Ministry of Energy.

5.8 The OPG Board Chair shall report to the Minister annually on the effectiveness of this MOA. Such report shall be provided to the Minister in writing within 90 days after the end of each fiscal period.

5.9 OPG shall provide to the Minister quarterly status updates on its response to the recommendations set out in the Auditor General's 2013 Report.

6 PERFORMANCE EXPECTATIONS

6.1 Operational Expectations

6.1.1 OPG shall operate its generating assets safely, efficiently and cost-effectively, and in accordance with all applicable safety and environmental regulations and standards.

6.1.2 OPG shall pursue cost-effective and efficient operational improvements that maintain the reliability of operations, the safety and security of OPG assets, employees and the public.

6.1.3 OPG shall undertake periodic benchmarking appropriate for its operations and type of assets, including as part of its submissions to the OEB.

6.1.4 OPG shall operate its Ontario based portfolio of generation assets in a manner that contributes to Ontario's and Canada's environmental objectives.

6.1.5 OPG shall ensure that a system is in place for the creation, collection, maintenance, and disposal of records in accordance with corporate policy, guidelines and best practices.

6.1.6 OPG shall make information targeted to the general public available in French where it meets a need to do so.

a. Recognizing that OPG's direct interaction with the public is often limited to regional or host community communications or broader public safety, OPG shall make information available in French only if reasonable in the circumstances.

b. For greater clarity, OPG shall provide the following services and products in French: advertising, news releases and educational materials where it meets a need to do so. As well, public safety communications, annual financial reports and educational materials will be provided in French and French speaking spokespeople will be made available as required for public and media interaction. French language products will be listed under a specific heading on the OPG web site.

c. This list shall be reviewed by OPG annually.

6.1.7 OPG shall support the province of Ontario in implementing its policy of putting conservation first by pursuing energy efficiency improvements in its operations where

economic. OPG shall identify a lead for reporting on its energy efficiency improvements to liaise with the Ministry on a regular basis.

OPG shall also continue to report on its energy efficiency results in its annual Sustainable Development Report.

6.2 Financial Expectations

6.2.1 As an OBCA Corporation and reporting issuer with a commercial mandate, OPG shall operate on a financially sustainable basis, earning a commercial rate of return in order to be able to service its current and future liabilities, to support the appropriate level of capital spending and to maintain or increase the value of its assets for its Shareholder.

6.2.2 OPG shall finance project investments and its operations in a prudent and cost-effective manner.

6.3 Compensation

6.3.1 OPG shall annually inform the Shareholder about its compliance with applicable legislation and regulations governing employee compensation.

7 LABOUR NEGOTIATIONS

7.1 In advance of commencing discussions for the renewal of its collective agreements with its unions, OPG shall seek advice from the Ministry on Provincial policy direction and relevant fiscal considerations affecting labour negotiations in the broader public and/or energy sectors.

7.2 When a collective agreement has been negotiated and ratified, OPG shall inform the Ministry of the results and details of the collective agreement in a timely manner.

8 COMMUNICATIONS

8.1 The OPG Board of Directors and the Minister shall meet as needed to enhance mutual understanding of interrelated strategic matters.

8.2 OPG's Board Chair, OPG's President and Chief Executive Officer and the Minister shall meet on an as needed basis.

8.3 OPG's President and Chief Executive Officer and the Deputy Minister shall meet on a regular and as needed basis on matters of mutual importance.

8.4 OPG's senior management and Ministry senior officials shall meet on a regular and as needed basis to discuss new and ongoing issues, discuss strategic business objectives and OPG's performance, and to clarify expectations or to address emergent issues.

8.5 The Shareholder shall specifically seek OPG's input on electricity policies that may impact OPG, when and as appropriate.

8.6 OPG's communications shall include promotion and awareness of electricity generation and efficiency where appropriate to increase public understanding of energy consumption and support the Ministry's efforts.

8.7 OPG shall consult with the Ministry, as appropriate, on key communication issues that may affect the Ministry or OPG. OPG shall keep the Ministry informed, as appropriate, of the key communication issues in a timely manner, and in advance if it is possible or appropriate to do so, having regard to the seriousness of the key communication issue.

8.8 In all other respects, OPG shall communicate with government ministries and agencies in a manner typical for an Ontario Corporation of its size and scope to ensure a timely flow of information.

9 TERM OF THIS AGREEMENT

9.1 The MOA shall be in effect for not more than five years from the date of execution.

9.2 The Shareholder and the OPG Board Chair shall renew or revise this MOA by the expiry date, or earlier, as required.

9.3 The Shareholder and the OPG Board Chair shall reaffirm this MOA for continuance with a change in either the Minister or Chair, and such reaffirmation may be done by letter and such letter shall be considered part and parcel of this Agreement as if the party or parties reaffirming the MOA had duly signed and executed an amendment to the MOA.

9.4 This MOA shall be posted publicly on OPG's website.

SIGNATURES

Original signed by:

Bernard Lord
Board Chair
Ontario Power Generation, Inc.

2015/05/20
Date

Original signed by:

Honourable Bob Chiarelli
Minister of Energy

2015/07/17
Date

APPENDIX 1: STATUTES OF PARTICULAR APPLICATION

Auditor General Act
Broader Public Sector Accountability Act, 2010
Business Corporations Act
Electricity Act, 1998
Freedom of Information and Protection of Privacy Act
Ontario Energy Board Act, 1998
Public Sector Compensation Restraint to Protect Public Services Act, 2010
Public Sector Expenses Review Act, 2009
Public Sector Salary Disclosure Act, 1996
Public Sector and MPP Accountability and Transparency Act, 2014

APPENDIX 2: APPLICABLE TB/MBC/MOF DIRECTIVES

Compensation Arrangements Compliance Report Directive
Perquisites Directive
Procurement Directive
Travel, Meal and Hospitality Directive
Ministers' Staff Commercial Transactions Directive

SCHEDULE D

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

APPROVALS

In this Application, OPG seeks the following specific approvals:

Revenue Requirement

1. The approval of the following revenue requirements for the nuclear facilities, net of the nuclear stretch factor, as set out in Ex. I1-1-1 and amended by Ex. N1-1-1 and Ex. N2-1-1:

Period	Revenue Requirement
January 1, 2017 through December 31, 2017	$3,161.4M
January 1, 2018 through December 31, 2018	$3,185.7M
January 1, 2019 through December 31, 2019	$3,273.2M
January 1, 2020 through December 31, 2020	$3,783.5M
January 1, 2021 through December 31, 2021	$3,397.8M

Rate Base

2. The approval of the following rate bases for the nuclear facilities, as summarized in Ex. B1-1-1 and amended by Ex. N1-1-1 and Ex. N2-1-1:

Year	Rate Base
2017	$3,627.9M
2018	$3,606.9M
2019	$3,476.2M
2020	$7,453.8M
2021	$7,887.0M

Production Forecasts

3. Approval of the following production forecasts for the nuclear facilities, as presented in Ex. E2-1-1.

Year	Production Forecast (TWh)
2017	38.1
2018	38.5
2019	39.0
2020	37.4
2021	35.4

Cost of Capital

4. Approval of a deemed capital structure of 51 per cent debt and 49 per cent equity and a combined rate of return on rate base to be determined using data available for the three months prior to the effective date of the payment amounts order, in accordance with the OEB's Cost of Capital Report, and currently set by the OEB at 8.78 per cent for 2017 and adjusted annually using the prevailing rate of return on equity specified by the OEB, as presented in Ex. C1-1-1 and amended by Ex. N1-1-1.

Payment Amounts

5. Effective January 1, 2017, $41.71/MWh for the average hourly net energy production (MWh) from the regulated hydroelectric facilities in any given month (the "hourly volume") for each hour of that month. Where production is over or under the hourly volume, regulated hydroelectric incentive revenue payments will be consistent with the OEB's Payment Amounts Order in EB-2013-0321. The calculation of the payment amount for the regulated hydroelectric facilities is set out in Ex. I1-2-1.

6. Approval of the rate-setting formula and related elements for setting payment amounts for the prescribed hydroelectric generating facilities in the period from January 1, 2017 through December 31, 2021, as proposed in Ex. A1-3-2.

7. Approval of the following payment amounts for the nuclear facilities:

Effective Date	Payment Amount
January 1, 2017	$76.39/MWh
January 1, 2018	$78.60/MWh
January 1, 2019	$84.83/MWh
January 1, 2020	$88.21/MWh
January 1, 2021	$92.02/MWh

Rate Smoothing and Mid-term Production Review

8. Approval of the nuclear rate smoothing proposal as set out in Ex. A1-3-3 and amended by Ex. N1-1-1 and Ex. N2-1-1, including the establishment of a rate smoothing deferral account and the portion of the approved nuclear revenue requirement that is to be recorded in that deferral account. Specifically, OPG proposes that annual OPG weighted average payment amounts (as defined by O. Reg. 53/05, s. 0.1(1)) reflect a constant 2.5% per year rate increase during the 2017 to 2021 period resulting in a deferred nuclear revenue requirement of $251M, $162M, $(38)M, $488M, and $142M in 2017, 2018, 2019, 2020 and 2021, respectively.

9. Approval of a mid-term production review in the first half of 2019 (i.e., prior to July 1, 2019) for:
    i. an update of the nuclear production forecast and consequential updates to nuclear fuel costs for the final two-and-a-half years of the five-year application period (July 1, 2019 to December 31, 2021); and
    ii. disposal of applicable audited deferral and variance account balances as well as any remaining unamortized portions of previously approved amounts with recovery period extending beyond December 31, 2018.

Deferral and Variance Accounts

10. Approval for recovery of the audited December 31, 2015 balances of the deferral and variance accounts identified in Exhibit H.

11. Approval to continue existing deferral and variance accounts, including interest, as proposed in Ex. H1-1-1.

12. Approval of a hydroelectric payment rider to recover the approved balances of the hydroelectric deferral and variance accounts (except the Pension & OPEB Cash Versus Accrual Differential Deferral Account) at a rate of $1.44/MWh applied to the output from the hydroelectric facilities, beginning January 1, 2017 and terminating December 31, 2018.

13. Approval of a nuclear payment rider to recover the approved balances of the nuclear deferral and variance accounts (except the Pension & OPEB Cash Versus Accrual Differential Deferral Account) at a rate of $2.85/MWh applied to the output from the nuclear facilities, beginning January 1, 2017 and terminating December 31, 2018.

14. Approval to establish the following deferral and variance accounts as described in Ex. H1-1-1:
    i. Darlington Refurbishment Rate Smoothing Deferral Account;
    ii. Mid-term Nuclear Production Variance Account;
    iii. Nuclear ROE Variance Account; and
    iv. Hydroelectric Capital Structure Variance Account.

Project Approvals

15. OPG seeks the following approvals for the Darlington Refurbishment Program:
    i. In-service additions to rate base of: (i) $350.4M in the 2016 Bridge Year; and (ii) for the 2017-2021 period, $8.5M in 2017, $8.9M in 2018, $4,809.2M in 2020, and $0.4M in 2021 on a forecast basis. These amounts reflect the addition to rate base of $4,800.2M related to Unit 2 in-service addition in 2020 and 2021, as well as $377.2M related to Unit Refurbishment Early In-Service Projects, Safety Improvement Opportunities, and Facilities & Infrastructure Projects. If actual additions to rate base are different from

forecast amounts, the cost impact of the difference will be recorded in the Capacity Refurbishment Variance Account ("CRVA") and any amounts greater than the forecast amounts added to rate base will be subject to a prudence review in a future proceeding; and

ii. OM&A expenditures of $41.5M in 2017, $13.8M in 2018, $3.5M in 2019, $48.4M in 2020, and $19.7M in 2021 (Ex. F2-7-1).

Interim Payment Amounts

16. An order from the OEB declaring OPG's current payment amounts for regulated hydroelectric and nuclear facilities interim as of January 1, 2017, if the order or orders approving the payment amounts are not implemented by January 1, 2017.

SCHEDULE E

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

PROCEDURAL DETAILS INCLUDING LISTS OF PARTIES AND WITNESSES

THE PROCEEDING

OPG filed its application for new payment amounts on May 27, 2016. On June 29, 2016, the OEB issued a Notice of Application which was published in accordance with the OEB's direction.

The key milestones in the proceeding are listed below:

- Procedural Order No.1 was issued on August 12, 2016. The procedural order set out dates for all procedural events up to and including the oral hearing. Procedural Order No. 1 also provided a draft issues list and made provision for submissions on issues and OPG's request for confidential treatment of certain information.
- An application presentation was held on September 1, 2016, and an untranscribed technical conference relating to the Darlington Refurbishment Program (DRP) and rate smoothing was held on September 23, 2016.
- The final unprioritized issues list was issued on September 23, 2016.
- Interrogatories were filed by Board staff on September 26, 2016 and by intervenors on October 3, 2016. The majority of responses were filed on October 26, 2016.
- A technical conference was held November 14 to 16, 2016.
- OEB staff filed evidence relating to DRP on November 21, 2016, and relating to Hydroelectric IRM Design and Equity Ratio on November 23, 2016.
- A motion hearing was held on December 16, 2016.
- Impact statements were filed on December 20, 2016 (to update the application to reflect material changes in costs), February 22, 2017 (to exclude in service additions related to two projects) and March 8, 2017 (revised smoothing proposal).
- The prioritized issues list was issued on December 21, 2016, and re-issued on January 27, 2017 with a single issue re-prioritized.
- A settlement conference was held January 9 to 11, 2017. Partial settlement was achieved. The settlement proposal was filed January 30, 3017, presented on March 6, 2017 and accepted by the OEB on March 20, 2017.
- Supplemental evidence was filed on February 14, 2017 (2017 ONFA Reference Plan) and April 4, 2017 (Hydroelectric Capacity Refurbishment Variance Account).
- The oral hearing took place on 23 days during the period February 27, 2017 to April 13, 2017.
- OPG filed its Argument-in-Chief on May 3, 3017.
- OEB staff filed its submission on May 19, 2017 and intervenors filed their submissions on May 29, 2017.
- OPG's reply argument was filed on June 19, 2017.

Nine procedural orders were issued during the course of the proceeding, some dealing with the schedule of the proceeding and prioritization of the issues list, but many dealing with matters of confidentiality, including submissions and decisions on requests for confidential treatment of documents.

PARTICIPANTS

Below is a list of participants and their representatives that were active either at the oral hearing or at another stage of the proceeding.

Ontario Power Generation Inc.	Charles Keizer Crawford Smith John Beauchamp Chris Fralick Barb Reuber
OEB Counsel and Staff	Michael Millar Ian Richler Violet Binette Rudra Mukherji Jane Scott Lawrie Gluck Keith Ritchie Donna Kwan Mark Rozic
Association of Major Power Consumers in Ontario	Ian Mondrow Shelley Grice Raymond Lukosius
Canadian Manufacturers & Exporters	Vince DeRose Emma Blanchard Scott Pollock
Consumers Council of Canada	Michael Buonaguro Julie Girvan
Energy Probe Research Foundation	Brady Yauch Lawrence Schwartz
Environmental Defence Canada Inc.	Kent Elson
Green Energy Coalition	David Poch Shawn-Patrick Stensil

London Property Management Association	Randy Aiken
Ontario Association of Physical Plant Administrators	Scott Walker
Power Workers' Union	Richard Stephenson Bayu Kidane Andrew Blair
Quinte Manufacturers Association	Michael McLeod
School Energy Coalition	Jay Shepherd Mark Rubenstein
Society of Energy Professionals	Bohdan Dumka
Sustainability-Journal	Ron Tolmie
Vulnerable Energy Consumers Coalition	Cynthia Khoo Lawrence Booth Mark Garner

In addition to the above, Canadian Wind Energy Association/Canadian Solar Industries Association, Candu Energy Inc., Lake Ontario Waterkeeper, Shell Energy North America (Canada) Inc. and SNC-Lavalin Nuclear Inc./Aecon Construction Group Inc. were registered intervenors in this proceeding.

WITNESSES

The following OPG employees appeared as witnesses.

Jeff Lyash	President and CEO
Dietmar Reiner	Senior Vice President, Nuclear Projects
Gary Rose	Vice President, Planning and Project Controls, Nuclear Projects
Leo Saagi	Director Controllership, Nuclear Projects
Chris Fralick	Vice President, Regulatory Affairs
Randy Pugh	Director, Ontario Regulatory Affairs, Regulatory Accounting and Finance

John Mauti	Vice President, Chief Controller & Accounting Officer
John Blazanin	Vice President, Nuclear Finance
Carla Carmichael	Vice President, Project Assurance and Contract Management, Nuclear Projects
Jamie Lawrie	Project Director
Jeff Lehman	Director Station Engineering
Bill Owens	Vice President, Refurbishment Execution
Alex Kogan	Vice President, Business Planning & Reporting
Dave Milton	Vice President Health, Safety, Employee and Labour Relations
Donna Rees	Director, Total Rewards
Lindsay Arseneau	Manager, Regulatory Affairs

OPG called the following expert witnesses: Patricia Galloway of Pegasus Global Holdings, Inc., Julia Frayer of London Economics International LLC, and James Coyne and Daniel Dane of Concentric Energy Advisors, Inc.

Andrew Pietrewicz of the Independent Electricity System Operator also appeared as a witness.

OEB staff called the following expert witnesses: Kenneth Roberts of Schiff Hardin LLP, Mark Lowry of Pacific Economics Group Research LLC and Bente Villadesen of the Brattle Group, Inc.

SCHEDULE F

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

Ontario Power Generation Inc.
2017-2021 Payment Amounts for
Prescribed Generating Facilities
EB-2016-0152

FINAL ISSUES LIST (REPRIORITIZED)

1. GENERAL

1.1 Secondary: Has OPG responded appropriately to all relevant OEB directions from previous proceedings?
1.2 Primary: Are OPG's economic and business planning assumptions appropriate that impact the nuclear facilities appropriate?
1.3 Oral Hearing: Is the overall increase in nuclear payment amounts including rate riders reasonable given the overall bill impact on customers?

2. RATE BASE

2.1 Primary: Are the amounts proposed for nuclear rate base (excluding those for the Darlington Refurbishment Program) appropriate?
2.2 Oral Hearing: Are the amounts proposed for nuclear rate base for the Darlington Refurbishment Program appropriate?

3. CAPITAL STRUCTURE AND COST OF CAPITAL

3.1 Primary: Are OPG's proposed capital structure and rate of return on equity appropriate?
3.2 Secondary: Are OPG's proposed costs for the long-term and short-term debt components of its capital structure appropriate?

4. CAPITAL PROJECTS

4.1 Oral Hearing: Do the costs associated with the nuclear projects that are subject to section 6(2)4 of O. Reg. 53/05 and proposed for recovery meet the requirements of that section?
4.2 Primary: Are the proposed nuclear capital expenditures and/or financial commitments (excluding those for the Darlington Refurbishment Program) reasonable?

4.3 Oral Hearing: Are the proposed nuclear capital expenditures and/or financial commitments for the Darlington Refurbishment Program reasonable?
4.4 Primary: Are the proposed test period in-service additions for nuclear projects (excluding those for the Darlington Refurbishment Program) appropriate?
4.5 Oral Hearing: Are the proposed test period in-service additions for the Darlington Refurbishment Program appropriate?

5. PRODUCTION FORECASTS

5.1 Primary: Is the proposed nuclear production forecast appropriate?

6. OPERATING COSTS

6.1 Oral Hearing: Is the test period Operations, Maintenance and Administration budget for the nuclear facilities (excluding that for the Darlington Refurbishment Program) appropriate?
6.2 Oral Hearing: Is the nuclear benchmarking methodology reasonable? Are the benchmarking results and targets flowing from OPG's nuclear benchmarking reasonable?
6.3 Secondary: Is the forecast of nuclear fuel costs appropriate?
6.4 Oral Hearing: Is the test period Operations, Maintenance and Administration budget for the Darlington Refurbishment Program appropriate?
6.5 Oral Hearing: Are the test period expenditures related to extended operations for Pickering appropriate?

Corporate Costs

6.6 Oral Hearing: Are the test period human resource related costs for the nuclear facilities (including wages, salaries, payments under contractual work arrangements, benefits, incentive payments, overtime, FTEs and pension costs, etc.) appropriate?
6.7 Oral Hearing: Are the corporate costs allocated to the nuclear business appropriate?
6.8 Oral Hearing: Are the centrally held costs allocated to the nuclear business appropriate?

Depreciation

6.9 Primary: Is the proposed test period nuclear depreciation expense appropriate?

Income and Property Taxes

6.10 Primary: Are the amounts proposed to be included in the test period nuclear revenue requirement for income and property taxes appropriate?

Other Costs

6.11 Secondary: Are the asset service fee amounts charged to the nuclear business appropriate?

7. OTHER REVENUES

Nuclear

7.1 Secondary: Are the forecasts of nuclear business non-energy revenues appropriate?

Bruce Nuclear Generating Station

7.2 Primary: Are the test period costs related to the Bruce Nuclear Generating Station, and costs and revenues related to the Bruce lease appropriate?

8. NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING LIABILITIES

8.1 Primary (reprioritized): Is the revenue requirement methodology for recovering nuclear liabilities in relation to nuclear waste management and decommissioning costs appropriate? If not, what alternative methodology should be considered?

8.2 Primary: Is the revenue requirement impact of the nuclear liabilities appropriately determined?

9. DEFERRAL AND VARIANCE ACCOUNTS

9.1 Primary: Is the nature or type of costs recorded in the deferral and variance accounts appropriate?

9.2 Primary: Are the methodologies for recording costs in the deferral and variance accounts appropriate?

9.3 Secondary: Are the balances for recovery in each of the deferral and variance accounts appropriate?
9.4 Secondary: Are the proposed disposition amounts appropriate?
9.5 Primary: Is the disposition methodology appropriate?
9.6 Secondary: Is the proposed continuation of deferral and variance accounts appropriate?
9.7 Primary: Is the rate smoothing deferral account in respect of the nuclear facilities that OPG proposes to establish consistent with O. Reg. 53/05 and appropriate?
9.8 Primary: Should any newly proposed deferral and variance accounts be approved by the OEB?

10. REPORTING AND RECORD KEEPING REQUIREMENTS

10.1 Secondary: Are the proposed reporting and record keeping requirements appropriate?
10.2 Primary: Is the monitoring and reporting of performance proposed by OPG for the regulated hydroelectric facilities appropriate?
10.3 Primary: Is the monitoring and reporting of performance proposed by OPG for the nuclear facilities appropriate?
10.4 Oral Hearing: Is the proposed reporting for the Darlington Refurbishment Program appropriate?

11. METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

Hydroelectric

11.1 Oral Hearing: Is OPG's approach to incentive rate-setting for establishing the regulated hydroelectric payment amounts appropriate?
11.2 Secondary: Are the adjustments OPG has made to the regulated hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?

Nuclear

11.3 Oral Hearing: Is OPG's approach to incentive rate-setting for establishing the nuclear payment amounts appropriate?
11.4 Oral Hearing: Does the Custom IR application adequately include expectations for productivity and efficiency gains relative to benchmarks and establish an appropriately structured incentive-based rate framework?

11.5 Primary: Is OPG's proposed mid-term review appropriate?
11.6 Oral Hearing: Is OPG's proposal for smoothing nuclear payment amounts consistent with O. Reg. 53/05 and appropriate?

General

11.7 Primary: Is OPG's proposed off-ramp appropriate?

12. IMPLEMENTATION

12.1 Primary: Are the effective dates for new payment amounts and riders appropriate?

SCHEDULE G

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

SETTLEMENT PROPOSAL

Ontario Power Generation Inc.

Application for 2017-2021 Payment Amounts
for Prescribed Generation Facilities

EB-2016-0152

March 6, 2017

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SETTLEMENT PROPOSAL

A. PREAMBLE

This Settlement Proposal is filed with the Ontario Energy Board (the "OEB") in connection with an application by Ontario Power Generation Inc. ("OPG") for an order or orders approving payment amounts for prescribed generation facilities commencing January 1, 2017 (the "Application").

Pursuant to the OEB's Procedural Order No. 1 dated August 12, 2016, a Settlement Conference was scheduled to be held commencing January 9, 2017. The settlement discussions were held at the OEB's offices from January 9 to 11, 2017, in a manner consistent with the process contemplated by the OEB's *Practice Direction on Settlement Conferences* (the "Practice Direction").

The Parties

OPG and the following intervenors (the "Intervenors", and, collectively with OPG, the "Parties"), participated in the Settlement Conference:

- Association of Major Power Consumers in Ontario ("AMPCO")
- Canadian Manufacturers & Exporters ("CME")
- Consumers Council of Canada ("CCC")
- Environmental Defence ("ED")
- Energy Probe Research Foundation ("EP")
- Green Energy Coalition ("GEC")
- London Property Management Association ("LPMA")
- Ontario Association of Physical Plant Administrators ("OAPPA")
- Power Workers' Union ("PWU")
- Quinte Manufacturers Association ("QMA")
- School Energy Coalition ("SEC")
- Society of Energy Professionals ("Society")
- Sustainability-Journal.ca ("SJ")
- Vulnerable Energy Consumers Coalition ("VECC")

OEB staff also participated in the settlement discussions, but in accordance with the Practice Direction is neither a Party nor a signatory to this Settlement Proposal. Although OEB Staff is not a Party to this Settlement Proposal, OEB Staff who did participate in the settlement

discussions are bound by the same confidentiality provisions that apply to the Parties to the proceeding.

This document is called a "Settlement Proposal" because it is proposed by the Parties to the OEB to settle certain issues in this proceeding. It is termed a proposal as between the Parties and the OEB. However, as between the Parties, and subject only to the OEB's approval of this Settlement Proposal, this document is intended to be a legal agreement, creating mutual rights and obligations, and to be binding and enforceable in accordance with its terms. As set forth later in the Preamble, this agreement is subject to a condition subsequent, that if this Settlement Proposal is not accepted by the OEB in its entirety, then, unless amended by the Parties, it is null and void and of no further effect. In entering this agreement, the Parties understand and agree that, pursuant to the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule B) (the "Act") the OEB has the exclusive jurisdiction with respect to the interpretation and enforcement of the terms hereof.

Confidentiality

The Parties agree that the settlement discussions shall be subject to the rules relating to confidentiality and privilege contained in the Practice Direction, as amended on October 28, 2016. The Parties understand that confidentiality in that context does not have the same meaning as confidentiality in the OEB's *Practice Direction on Confidential Filings*, and the rules of that latter document do not apply. The Parties interpret the revised Practice Direction to mean that the documents and other information provided, the discussion of each issue, the offers and counter-offers, and the negotiations leading to settlement – or not – of each issue during the course of the settlement discussions are strictly confidential and without prejudice. None of the foregoing is admissible as evidence in this proceeding, or otherwise, except where the filing of such settlement information is necessary to resolve a subsequent dispute over the interpretation of any provision of this Settlement Proposal and subject to the direction of the OEB. In such case, only the settlement information that is necessary for the purpose of interpreting the Settlement Proposal shall be filed and such information shall be filed using the appropriate protections afforded under the relevant legislation and OEB instruments.

Further, the Parties have a positive and ongoing obligation not to disclose settlement information to persons who were not attendees at the settlement conference. However, the Parties agree that "attendees" is deemed to include, in this context, persons who were not physically in attendance at the settlement conference but were: (a) any persons or entities that the Parties engage to assist them with the settlement conference; and (b) any persons or entities from whom the Parties seek instructions with respect to the negotiations; in each case provided that any such persons or entities have agreed to be bound by the same confidentiality provisions.

Parameters of the Proposed Settlement

Without prejudice to the positions of the Parties with respect to issues that might otherwise be considered in this proceeding, the Parties have organized this Settlement Proposal in a manner that is consistent with the Final Prioritized Issues List as set out in Schedule 'A' of the OEB's Decision on Issues List Prioritization dated December 21, 2016, which categorizes the issues as "Primary", "Secondary", or "Oral Hearing".

The Parties are pleased to inform the OEB that the Parties have reached agreement to settle, in full or in part, nine of the issues, including two Primary issues and seven Secondary issues. If the Settlement Proposal is accepted by the OEB, the Parties will not adduce any evidence or argument during the hearing on any of the issues or aspects of the issues on which Parties have reached agreement, as the Parties have agreed to the proposed settlement.

The Settlement Proposal describes the agreements reached on the settled and partially settled issues, and identifies the Parties who agree or who take no position on each issue. For each issue, the Settlement Proposal provides a direct reference to the supporting evidence on the record to date. In this regard, the Parties are of the view that the evidence provided is sufficient to support the Settlement Proposal in relation to such settled or partially settled issue, and moreover, that the quality and detail of the supporting evidence, together with the corresponding rationale, should allow the OEB to make findings on these issues.

Best efforts have been made to identify all of the evidence that relates to each settled or partially settled issue. The supporting evidence is identified individually by reference to its exhibit number in an abbreviated format such that, for example, Exhibit A4, Tab 1, Schedule 1 will be referred to as Ex. A4-1-1. In this regard, OPG's response to an interrogatory ("IR") is described by citing the issue number, name of the Party and the number of the IR (e.g. L-3.2-1 Staff-22). The identification and listing of the evidence that relates to each issue is provided to assist the OEB. The identification and listing of the evidence that relates to each settled or partially settled issue is not intended to limit any Party who wishes to assert, either in any other proceeding, or in a hearing in this proceeding, that other evidence is relevant to a particular settled or partially settled issue, that evidence listed is not relevant to the issue, or that evidence listed is also relevant to other issues.

According to the Practice Direction (p. 4), the Parties must consider whether a Settlement Proposal should include an appropriate adjustment mechanism for any settled issue that may be affected by external factors. OPG and the other Parties who participated in the settlement discussions agree that no settled or partially settled issue requires an adjustment mechanism other than as may be expressly set forth herein.

All of the issues contained in this proposal have been settled or partially settled by the Parties as a package and none of the provisions of these are severable. Numerous compromises were made by the Parties with respect to various matters to arrive at this Settlement Proposal. The distinct

issues addressed in this proposal are intricately interrelated, and reductions or increases to the agreed-upon amounts or changes in other agreed-upon parameters may have consequences in other areas of this proposal, which may be unacceptable to one or more of the Parties. If the OEB does not accept this package in its entirety, then there is no settlement (unless the Parties agree that any portion of the package that the OEB does accept may continue as part of a valid Settlement Proposal).

In the event the OEB directs the Parties to make reasonable efforts to revise the Settlement Proposal, the Parties agree to use reasonable efforts to discuss any potential revisions, but no party will be obligated to accept any proposed revision. The Parties agree that all of the Parties who took a position on a particular issue must agree with any revised Settlement Proposal as it relates to that issue prior to its re-submission to the OEB.

None of the Parties can withdraw from this Settlement Proposal except in accordance with Rule 30.05 of the OEB's *Rules of Practice and Procedure*.

Attached to this Settlement Proposal are:

Attachment 1: List of Existing OPG Deferral and Variance Accounts

Attachment 2: List of Settled, Partially Settled and Unsettled Issues

The Attachments to this Settlement Proposal provide further support for the Settlement Proposal. The Parties acknowledge that the Attachments were prepared by OPG. While the intervenors have reviewed the Attachments, the intervenors are relying upon their accuracy, and the accuracy of the underlying evidence, in entering into this Settlement Proposal.

Unless stated otherwise, the settlement of any particular issue in this proceeding and the positions of the Parties in this Settlement Proposal are without prejudice to the rights of the Parties to raise the same issue and/or to take any position thereon in any other proceeding, whether or not OPG is a party to such proceeding, provided that no Party shall take a position that would result in the agreement not applying in accordance with the terms contained herein.

Where in this agreement, the Parties "Accept" the evidence of OPG, or "agree" to a revised term or condition, including a revised budget or forecast, then unless the agreement expressly states to the contrary, the words "for the purpose of settlement of the issues herein" shall be deemed to qualify that acceptance or agreement.

Issues Fully or Partially Settled by the Parties

As shown below, the Parties have agreed to fully settle four issues and partially settle five issues in this proceeding. All other issues will proceed to hearing if the OEB accepts this Settlement Proposal.

Issue	Settled or Partially Settled
Capital Structure and Cost of Capital	
3.2 Secondary: Are OPG's proposed costs for the long-term and short term components of its capital structure appropriate?	Partially Settled
Operating Costs	
6.3 Secondary: Is the forecast of nuclear fuel costs appropriate?	Partially Settled
6.11 Secondary: Are the asset service fee amounts charged to the nuclear business appropriate?	Settled
Other Revenues – Nuclear	
7.1 Secondary: Are the forecasts of nuclear business non-energy revenues appropriate?	Settled
Deferral and Variance Accounts	
9.1 Primary: Is the nature or type of costs recorded in the deferral and variance accounts appropriate?	Partially Settled
9.2 Primary: Are the methodologies for recording costs in the deferral and variance accounts appropriate?	Partially Settled
9.3 Secondary: Are the balances for recovery in each of the deferral and variance accounts appropriate?	Partially Settled
9.6 Secondary: Is the proposed continuation of deferral and variance accounts appropriate?	Settled
Methodologies for Setting Payment Amounts	
11.2 Secondary: Are the adjustments OPG has made to the regulated hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?	Settled

Based on the foregoing, and the evidence and rationale provided below, the Parties accept this Settlement Proposal as appropriate and recommend its acceptance by the OEB.

B. Description of Settlement

Issue 3.2 Secondary: Are OPG's proposed costs for the long-term and short term components of its capital structure appropriate?

Partially Settled

There is an agreement to partially settle this issue as described below.

As indicated in Ex. C1-1-2 and Ex. C1-1-3, OPG seeks to recover the costs of long-term and short-term debt associated with its regulated operations during the IR term. The Parties agree that the assumed interest rates used to calculate OPG's proposed debt costs are appropriate on the basis of its written evidence, subject to the following:

- Given that the aggregate debt costs relate to OPG's capital structure and rate base, which are unsettled primary issues (see Issues 2.1, 2.2 and 3.1), the Parties agree that their acceptance in respect of Issue 3.2 is subject to the application of the agreed interest rates to the eventual debt financed component of rate base as determined by the OEB.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. C1-1-2	Cost of Long-term Debt
Ex. C1-1-3	Cost of Short-term Debt
L-3.2-1 Staff-22	
L-3.2-1 Staff-23	
L-3.2-6 EP-5	
L-3.2-6 EP-6	
L-3.2-6 EP-8	
L-3.2-11 LPMA-1	
L-3.2-11 LPMA-2	
L-3.2-11 LPMA-3	
L-3.2-11 LPMA-4	
L-3.2-20 VECC-12	
L-3.2-20 VECC-13	

Issue 6.3 Secondary: Is the forecast of nuclear fuel costs appropriate?
Partially Settled

There is an agreement to partially settle this issue as described below.

In the Application, OPG seeks to recover its proposed nuclear fuel costs for the IR term. The proposed fuel costs include the weighted average cost of manufactured uranium fuel bundles loaded into a reactor ("nuclear fuel bundle cost"), used nuclear fuel storage and disposal costs, and fuel oil costs. As indicated in Ex. F2-5-2, actual nuclear fuel bundle costs are driven by total energy production, unit cost of new fuel loaded, and fuel utilization efficiency.

A partial settlement has been reached on this issue. The Parties have agreed to a 2% downward adjustment to the nuclear fuel bundle unit cost forecast in each year of the IR term relative to the forecast in the Application at Ex. F2-5-1 Table 1, line 4, resulting in fuel bundle unit costs as follows:

- 2017: $4.18/MWh
- 2018: $4.14/MWh
- 2019: $4.07/MWh
- 2020: $4.39/MWh
- 2021: $4.19/MWh

The other components of OPG's fuel costs forecast, including the impact of forecast energy production on nuclear fuel bundle cost, all components of used nuclear fuel costs, and fuel oil costs, are unsettled.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. F2-5-1 Nuclear Fuel Costs
Ex. F2-5-2 Comparison of Nuclear Fuel Costs
Ex. L-6.3-1 Staff-111
Ex. L-6.3-1 Staff-112
Ex. L-6.3-2 AMPCO-116
Ex. L-6.3-2 AMPCO-117
Ex. L-6.3-2 AMPCO-118

Ex. L-6.3-5 CCC-28
Ex. L-6.3-5 CCC-29
Ex. L-6.3-15 SEC-66
Ex. L-6.3-20 VECC-26
Ex. L-6.3-20 VECC-27
Ex. JT2.10
Ex. JT2.11
Ex. JT2.15

Issue 6.11 Secondary: Are the asset service fee amounts charged to the nuclear business appropriate?

Settled

There is an agreement to settle this issue as described below.

In the Application, OPG seeks to recover its proposed asset service fees for the IR term. The Parties agree that the proposed asset service fee amounts charged to the nuclear business are appropriate on the basis of OPG's evidence.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. F3-2-1	Asset Service Fees
Ex. F3-2-2	Comparison of Asset Service Fees
L-6.11-1 Staff-197	
L-6.11-1 Staff-198	

Issue 7.1 Secondary: Are the forecasts of nuclear business non-energy revenues appropriate?

Settled

There is an agreement to settle this issue as described below.

As indicated in Ex. G2-1-1, OPG has forecasted the non-energy revenues to be derived from its nuclear operations during the IR term. The forecast amounts are included as an offset in the calculation of OPG's revenue requirement, adjusted for 50/50 sharing of forecasted net revenue from sales of heavy water between OPG and ratepayers, consistent with prior OPG payment amounts applications. The Parties have agreed that OPG's forecast amounts of nuclear non-energy revenues are appropriate, subject to the following increases to OPG's net revenue forecast for heavy water sales for each year of the IR term (totalling a $12.2M increase over the IR term), relative to the forecast in the Application at Ex. G2-1-1 Table 1, line 1:

- 2017: $6.1M
- 2018: $1.3M
- 2019: $1.5M
- 2020: $1.6M
- 2021: $1.7M

These amounts represent increases at 100% of net revenues for heavy water sales, prior to the 50/50 sharing arrangement.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. G2-1-1 Non-Energy Revenues (Nuclear)
Ex. G2-1-2 Comparison of Non-Energy Revenues (Nuclear)
Ex. L-7.1-1 Staff-199
Ex. L-7.1-1 Staff-200
Ex. L-7.1-1 Staff-201
Ex. L-7.1-12 OAPPA-4
Ex. L-7.1-15 SEC-89
Ex. L-7.1-20 VECC-36
Ex. L-7.1-20 VECC-37
Ex. L-7.1-20 VECC-38

Issue 9.1 Primary: Is the nature or type of costs recorded in the deferral and variance accounts appropriate?

Partially Settled

There is an agreement to partially settle the issue as described below.

Ex. H1-1-1 describes OPG's deferral and variance accounts, which were established pursuant to O. Reg. 53/05 and to the OEB's decisions and orders in prior OPG payment amounts and other applications. The Parties agree that the nature and type of costs recorded in the year-end 2015 balances of deferral and variance accounts are appropriate on the basis of OPG's evidence, except for the following accounts which were excluded from the Parties' settlement on this issue:

- Capacity Refurbishment Variance Account (Nuclear);
- Nuclear Liability Deferral Account; and
- Bruce Lease Net Revenues Variance Account.

For ease of reference, a complete list of OPG's existing deferral and variance accounts is included in Attachment 1 to this Settlement Proposal.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. H1-1-1 Deferral and Variance Accounts
L-9.1-1 Staff-209
L-9.1-2 AMPCO-151

Issue 9.2 Primary: Are the methodologies for recording costs in the deferral and variance accounts appropriate?

Partially Settled

There is an agreement to partially settle the issue as described below.

Ex. H1-1-1 discusses the methodologies that have been used to record entries into OPG's existing deferral and variance accounts to date and the proposed methodologies for making

entries into the accounts proposed for continuation. The Parties agree that the methodologies used and proposed to be used by OPG for recording costs in the deferral and variance accounts to and including December 31, 2015 are appropriate on the basis of OPG's evidence, except for the following accounts which were excluded from the Parties' settlement on this issue:

- Capacity Refurbishment Variance Account (Nuclear);
- Nuclear Liability Deferral Account; and
- Bruce Lease Net Revenues Variance Account.

For ease of reference, a complete list of OPG's existing deferral and variance accounts is included in Attachment 1 to this Settlement Proposal.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. H1-1-1 Deferral and Variance Accounts
L-9.2-1 Staff-212
L-9.2-1 Staff-213
Ex. JT3.14

Issue 9.3 Secondary: Are the balances for recovery in each of the deferral and variance accounts appropriate?

Partially Settled

There is an agreement to partially settle the issue as described below.

In the Application, OPG requests recovery of the audited, year-end 2015 balances in the deferral and variance accounts, less 2016 amortization amounts approved in EB-2014-0370, through a hydroelectric payment rider and a nuclear payment rider. This request does not apply to the Pension & OPEB Cash Versus Accrual Differential Deferral Account, since the OEB indicated in the EB-2013-0321 Decision with Reasons that the clearance of that account is subject to the completion of the OEB's generic proceeding on pension and OPEB costs (EB-2015-0040). The relevant account balances are set out in Ex. H1-2-1 Table 1, col. (c) and Table 2, col. (c).

The Parties agree that the proposed year-end 2015 balances for recovery in each of the deferral and variance accounts are appropriate on the basis of OPG's evidence, except for (i) the Pension & OPEB Cash Versus Accrual Differential Deferral Account, for the reason noted above; and (ii) the following accounts which were excluded from the Parties' settlement on this issue:

- Capacity Refurbishment Variance Account (Nuclear component);
- Nuclear Liability Deferral Account; and
- Bruce Lease Net Revenues Variance Account.

For ease of reference, a complete list of OPG's existing deferral and variance accounts is included in Attachment 1 to this Settlement Proposal.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, SJ, VECC
Parties Taking no Position:	ED, GEC, PWU

Evidence

The evidence in relation to this issue includes the following:

Ex. H1-1-1	Deferral and Variance Accounts
Ex. H1-2-1	Clearance of Deferral and Variance Accounts
L-9.3-1 Staff-214	

Issue 9.6 Secondary: Is the proposed continuation of deferral and variance accounts appropriate?

Settled

There is an agreement to settle the issue as described below.

In the Application, OPG seeks approval for the continuation of its existing deferral and variance accounts (including the proposed termination of the Pickering Life Extension Depreciation Variance Account as of the effective date of the payment amounts order in respect of this Application), as described in Ex. H1-1-1. The Parties agree that the proposed continuation of deferral and variance accounts is appropriate on the basis of OPG's evidence. Provided that, for greater certainty, agreement to continue the accounts is not intended to imply agreement with the existing or proposed methodology, entries, or other terms relating to those accounts that are excluded from the settlement of issues 9.1, 9.2, and 9.3.

For ease of reference, a complete list of OPG's existing deferral and variance accounts is included in Attachment 1 to this Settlement Proposal.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, SJ, VECC
Parties Taking no Position:	ED, GEC, PWU

Evidence

The evidence in relation to this issue includes the following:

Ex. H1-1-1 Deferral and Variance Accounts

Issue 11.2 Secondary: Are the adjustments OPG has made to the regulated hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?

Settled

There is an agreement to settle the issue as described below.

In the Application, OPG proposes to use the current hydroelectric payment amounts as approved in EB-2013-0321 as the "going in" rates for the IR term, adjusted to correct for the one-time allocation of the nuclear tax loss to the hydroelectric business in the EB-2013-0321 payment amounts application.

Without prejudice to any position a Party may take in respect of Issue 11.1, the Parties agree that the tax-loss adjustment OPG made to the regulated hydroelectric payment amounts arising from EB-2013-0321 is an appropriate adjustment.

Approval

Parties in Support:	AMPCO, CME, CCC, EP, LPMA, OAPPA, QMA, SEC, Society, VECC
Parties Taking no Position:	ED, GEC, PWU, SJ

Evidence

The evidence in relation to this issue includes the following:

Ex. A1-3-2 Rate-setting Framework
Section 2.3.2: “Going in” Rates
Ex. I1-2-1 Regulated Hydroelectric Payment Amount
Ex. L-11.2-1 Staff-253
Ex. L-11.2-1 Staff-254
Ex. L-11.2-5 CCC-48

ATTACHMENTS

Attachment 1

LIST OF EXISTING OPG DEFERRAL AND VARIANCE ACCOUNTS

- Hydroelectric Water Conditions Variance Account
- Ancillary Services Net Revenues Variance Account – Hydroelectric and Nuclear Sub-Accounts
- Hydroelectric Incentive Mechanism Variance Account
- Hydroelectric Surplus Baseload Generation Variance Account
- Income and Other Taxes Variance Account
- Capacity Refurbishment Variance Account[Note (a)]
- Pension and OPEB Cost Variance Account
- Hydroelectric Deferral and Variance Over/Under Recovery Variance Account
- Gross Revenue Charge Variance Account
- Pension & OPEB Cash Payment Variance Account
- Pension & OPEB Cash Versus Accrual Differential Deferral Account[Note (b)]
- Niagara Tunnel Project Pre-December 2008 Disallowance Variance Account
- Nuclear Liability Deferral Account[Note (c)]
- Nuclear Development Variance Account
- Bruce Lease Net Revenues Variance Account – Derivative and Non-Derivative Sub-Accounts[Note (c)]
- Pickering Life Extension Depreciation Variance Account (proposed to be terminated as of the effective date of the payment amounts order of this Application)
- Nuclear Deferral and Variance Over/Under Recovery Variance Account
- Impact Resulting from Changes in Station End-of-Life Dates (December 31, 2015) Deferral Account

Note (a): Excluded from the scope of partial settlement on Issues 9.1 and 9.2. The Nuclear component of the CRVA is excluded from the scope of partial settlement on Issue 9.3.
Note (b): Excluded from the scope of partial settlement on Issue 9.3.
Note (c): Excluded from the scope of partial settlement on Issues 9.1, 9.2 and 9.3.

Attachment 2

LIST OF SETTLED, PARTIALLY SETTLED AND UNSETTLED ISSUES[1]

1. GENERAL

1.1 Secondary: Has OPG responded appropriately to all relevant OEB directions from previous proceedings?

1.2 Primary: Are OPG's economic and business planning assumptions appropriate that impact the nuclear facilities appropriate?

1.3 Oral Hearing: Is the overall increase in nuclear payment amounts including rate riders reasonable given the overall bill impact on customers?

2. RATE BASE

2.1 Primary: Are the amounts proposed for nuclear rate base (excluding those for the Darlington Refurbishment Program) appropriate?

2.2 Oral Hearing: Are the amounts proposed for nuclear rate base for the Darlington Refurbishment Program appropriate?

3. CAPITAL STRUCTURE AND COST OF CAPITAL

3.1 Primary: Are OPG's proposed capital structure and rate of return on equity appropriate?

[Partially Settled]

3.2 Secondary: Are OPG's proposed costs for the long-term and short-term debt components of its capital structure appropriate?

4. CAPITAL PROJECTS

4.1 Oral Hearing: Do the costs associated with the nuclear projects that are subject to section 6(2)4 of O. Reg. 53/05 and proposed for recovery meet the requirements of that section?

4.2 Primary: Are the proposed nuclear capital expenditures and/or financial commitments (excluding those for the Darlington Refurbishment Program) reasonable?

4.3 Oral Hearing: Are the proposed nuclear capital expenditures and/or

[1] Unless marked as "Settled" or "Partially Settled", an issue remains unsettled.

financial commitments for the Darlington Refurbishment Program reasonable?

4.4 Primary: Are the proposed test period in-service additions for nuclear projects
(excluding those for the Darlington Refurbishment Program) appropriate?

4.5 Oral Hearing: Are the proposed test period in-service additions for the Darlington Refurbishment Program appropriate?

5. PRODUCTION FORECASTS

5.1 Primary: Is the proposed nuclear production forecast appropriate?

6. OPERATING COSTS

6.1 Oral Hearing: Is the test period Operations, Maintenance and Administration budget for the nuclear facilities (excluding that for the Darlington Refurbishment Program) appropriate?

6.2 Oral Hearing: Is the nuclear benchmarking methodology reasonable? Are the benchmarking results and targets flowing from OPG's nuclear benchmarking reasonable?

[Partially Settled]

6.3 Secondary: Is the forecast of nuclear fuel costs appropriate?

6.4 Oral Hearing: Is the test period Operations, Maintenance and Administration budget for the Darlington Refurbishment Program appropriate?

6.5 Oral Hearing: Are the test period expenditures related to extended operations for Pickering appropriate?

Corporate Costs

6.6 Oral Hearing: Are the test period human resource related costs for the nuclear facilities (including wages, salaries, payments under contractual work arrangements, benefits, incentive payments, overtime, FTEs and pension costs, etc.) appropriate?

6.7 Oral Hearing: Are the corporate costs allocated to the nuclear business appropriate?

6.8 Oral Hearing: Are the centrally held costs allocated to the nuclear business

appropriate?

Depreciation

6.9 Primary: Is the proposed test period nuclear depreciation expense appropriate?

Income and Property Taxes

6.10 Primary: Are the amounts proposed to be included in the test period nuclear revenue requirement for income and property taxes appropriate?

Other Costs

[Settled] 6.11 Secondary: Are the asset service fee amounts charged to the nuclear business appropriate?

7. OTHER REVENUES

Nuclear

[Settled] 7.1 Secondary: Are the forecasts of nuclear business non-energy revenues appropriate?

Bruce Nuclear Generating Station

7.2 Primary: Are the test period costs related to the Bruce Nuclear Generating Station, and costs and revenues related to the Bruce lease appropriate?

8. NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING LIABILITIES

8.1 Secondary: Is the revenue requirement methodology for recovering nuclear liabilities in relation to nuclear waste management and decommissioning costs appropriate? If not, what alternative methodology should be considered?

8.2 Primary: Is the revenue requirement impact of the nuclear liabilities appropriately determined?

9. DEFERRAL AND VARIANCE ACCOUNTS

[Partially 9.1 Primary: Is the nature or type of costs recorded in the deferral and variance

Settled] accounts appropriate?

[Partially Settled] 9.2 Primary: Are the methodologies for recording costs in the deferral and variance accounts appropriate?

[Partially Settled] 9.3 Secondary: Are the balances for recovery in each of the deferral and variance accounts appropriate?

9.4 Secondary: Are the proposed disposition amounts appropriate?

9.5 Primary: Is the disposition methodology appropriate?

[Settled] 9.6 Secondary: Is the proposed continuation of deferral and variance accounts appropriate?

9.7 Primary: Is the rate smoothing deferral account in respect of the nuclear facilities that OPG proposes to establish consistent with O. Reg. 53/05 and appropriate?

9.8 Primary: Should any newly proposed deferral and variance accounts be approved by the OEB?

10. REPORTING AND RECORD KEEPING REQUIREMENTS

10.1 Secondary: Are the proposed reporting and record keeping requirements appropriate?

10.2 Primary: Is the monitoring and reporting of performance proposed by OPG for the regulated hydroelectric facilities appropriate?

10.3 Primary: Is the monitoring and reporting of performance proposed by OPG for the nuclear facilities appropriate?

10.4 Oral Hearing: Is the proposed reporting for the Darlington Refurbishment Program appropriate?

11. METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

Hydroelectric

11.1 Oral Hearing: Is OPG's approach to incentive rate-setting for establishing the regulated hydroelectric payment amounts appropriate?

[Settled] 11.2 Secondary: Are the adjustments OPG has made to the regulated

hydroelectric payment amounts arising from EB-2013-0321 appropriate for establishing base rates for applying the hydroelectric incentive regulation mechanism?

Nuclear

11.3 Oral Hearing: Is OPG's approach to incentive rate-setting for establishing the nuclear payment amounts appropriate?

11.4 Oral Hearing: Does the Custom IR application adequately include expectations for productivity and efficiency gains relative to benchmarks and establish an appropriately structured incentive-based rate framework?

11.5 Primary: Is OPG's proposed mid-term review appropriate?

11.6 Oral Hearing: Is OPG's proposal for smoothing nuclear payment amounts consistent with O. Reg. 53/05 and appropriate?

General

11.7 Primary: Is OPG's proposed off-ramp appropriate?

12. IMPLEMENTATION

12.1 Primary: Are the effective dates for new payment amounts and riders appropriate?

SCHEDULE H

DECISION AND ORDER

ONTARIO POWER GENERATION INC.

EB-2016-0152

DECEMBER 28, 2017

2018 Input Price Index for OPG's Prescribed Hydroelectric Price Cap IR Plan

Year	Inputs and Assumptions											
	Non-Labour GDP-IPI (FDD) - National							Labour AWE - All Employees - Ontario			Resultant Values - Annual Growth for the 2-factor IPI	
	Q1	Q2	Q3	Q4	Annual	Annual % Change	Weight	Annual	Annual % Change	Weight	Annual	Annual % Change
2015	114.6	115	115.7	116.1	115.35			$ 962.94			103.7	
2016	116.4	116.3	116.8	117.5	116.750	**1.2%**	**88%**	$ 973.56	**1.1%**	**12%**	**104.9**	**1.2%**

Sources:

- GDP-IPI (FDD): Statistics Canada, Table 380-0066 - Price Indexes, gross domestic product, quarterly (2007 = 100 unless otherwise noted) - 2016 Q2, issued August 31, 2017
- Average Weekly Earnings (AWE): Statistics Canada, Table 281-0027 - Average weekly earnings (SEPH), by type of employee for selected industries classified using the North American Industry Classification System (NAICS), annual (current dollars), March 31, 2017 - data extracted August 31, 2017

Data accessed August 31, 2017

Her Majesty The Queen *Appellant*

v.

Chikmaglur Mohan *Respondent*

INDEXED AS: R. *v.* MOHAN

File No.: 23063.

1993: November 9; 1994: May 5.

Present: Lamer C.J. and La Forest, L'Heureux-Dubé, Sopinka, Gonthier, Cory, McLachlin, Iacobucci and Major JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR ONTARIO

Evidence — Admissibility — Expert evidence — Nature of expert evidence — Expert evidence as to disposition — Pediatrician charged with sexual assault of patients — Expert witness called to testify that character traits of accused not fitting psychological profile of putative perpetrator of offences — Whether expert's testimony admissible.

Criminal law — Expert evidence — Nature of expert evidence — Expert evidence as to disposition — Pediatrician charged with sexual assault of patients — Expert witness called to testify that character traits of accused not fitting psychological profile of putative perpetrator of offences — Whether expert's testimony admissible.

Respondent, a practising pediatrician, was charged with four counts of sexual assault on four female patients, aged 13 to 16 at the relevant time, during medical examinations conducted in his office. His counsel indicated that he intended to call a psychiatrist who would testify that the perpetrator of the alleged offences would be part of a limited and unusual group of individuals and that respondent did not fall within that narrow class because he did not possess the characteristics belonging to that group. The psychiatrist testified in a *voir dire* that the psychological profile of the perpetrator of the first three complaints was likely that of a pedophile, while the profile of the perpetrator of the fourth complaint that of a sexual psychopath. The psychiatrist intended to testify that the respondent did not fit the profiles but the evidence was ruled inadmissible at the conclusion of the *voir dire*.

Respondent was found guilty by the jury and appealed. The Court of Appeal allowed respondent's

Sa Majesté la Reine *Appelante*

c.

Chikmaglur Mohan *Intimé*

RÉPERTORIÉ: R. *c.* MOHAN

N° du greffe: 23063.

1993: 9 novembre; 1994: 5 mai.

Présents: Le juge en chef Lamer et les juges La Forest, L'Heureux-Dubé, Sopinka, Gonthier, Cory, McLachlin, Iacobucci et Major.

EN APPEL DE LA COUR D'APPEL DE L'ONTARIO

Preuve — Admissibilité — Preuve d'expert — Nature de la preuve d'expert — Preuve d'expert quant à la prédisposition — Pédiatre accusé d'agression sexuelle sur des patientes — Expert appelé à témoigner que les traits de caractère de l'accusé ne répondent pas au profil psychologique de l'auteur putatif des infractions — Le témoignage d'expert est-il admissible?

Droit criminel — Preuve d'expert — Nature de la preuve d'expert — Preuve d'expert quant à la prédisposition — Pédiatre accusé d'agression sexuelle sur des patientes — Expert appelé à témoigner que les traits de caractère de l'accusé ne correspondent pas au profil psychologique de l'auteur putatif des infractions — Le témoignage d'expert est-il admissible?

L'intimé, un pédiatre, fait face à quatre chefs d'accusation d'agression sexuelle commise sur quatre patientes, âgées à l'époque de 13 à 16 ans, pendant leur examen médical dans le bureau de l'intimé. Son avocat a exprimé l'intention d'appeler un psychiatre qui témoignerait que l'auteur des infractions alléguées appartenait à un groupe limité et inhabituel d'individus et que l'intimé ne faisait pas partie de cette catégorie restreinte parce qu'il n'en possédait pas les caractéristiques propres. Le psychiatre a témoigné au voir-dire que le profil psychologique de l'auteur des trois premières agressions alléguées était probablement celui d'un pédophile alors que celui de la quatrième était celui d'un psychopathe sexuel. Le psychiatre avait l'intention de témoigner que l'intimé ne correspondait pas à ces profils, mais son témoignage a été jugé inadmissible à l'issue du voir-dire.

Déclaré coupable par le jury, l'intimé a interjeté appel. La Cour d'appel a accueilli l'appel de l'intimé,

appeal, quashed the convictions and ordered a new trial. The Court of Appeal therefore found it unnecessary to deal with the Crown's sentence appeal. At issue here was the determination of the circumstances in which expert evidence is admissible to show that character traits of an accused person do not fit the psychological profile of the putative perpetrator of the offences charged. Resolution of this issue involved an examination of the rules relating to (i) expert evidence, and (ii) character evidence.

Held: The appeal should be allowed.

The evidence should be excluded.

Expert Evidence

Admission of expert evidence depends on the application of the following criteria: (a) relevance; (b) necessity in assisting the trier of fact; (c) the absence of any exclusionary rule; and (d) a properly qualified expert. Relevance is a threshold requirement to be decided by the judge as a question of law. Logically relevant evidence may be excluded if its probative value is overborne by its prejudicial effect, if the time required is not commensurate with its value or if it can influence the trier of fact out of proportion to its reliability. The reliability versus effect factor has special significance in assessing the admissibility of expert evidence. Expert evidence should not be admitted where there is a danger that it will be misused or will distort the fact-finding process, or will confuse the jury.

Expert evidence, to be necessary, must likely be outside the experience and knowledge of a judge or jury and must be assessed in light of its potential to distort the fact-finding process. Necessity should not be judged by too strict a standard. The possibility that evidence will overwhelm the jury and distract them from their task can often be offset by proper instructions. Experts, however, must not be permitted to usurp the functions of the trier of fact causing a trial to degenerate to a contest of experts.

Expert evidence can be excluded if it falls afoul of an exclusionary rule of evidence separate and apart from the opinion rule itself. The evidence must be given by a witness who is shown to have acquired special or peculiar knowledge through study or experience in respect of the matters on which he or she undertakes to testify.

annulé les déclarations de culpabilité et ordonné un nouveau procès. La Cour a ainsi conclu qu'il n'était pas nécessaire d'entendre l'appel du ministère public contre la sentence. Il faut déterminer en l'espèce les circonstances dans lesquelles la preuve d'expert est admissible pour démontrer que des traits de caractère d'un accusé ne répondent pas au profil psychologique de l'auteur putatif des infractions reprochées. La résolution de la question passe par l'examen des règles en matière (i) de preuve d'expert, et (ii) de preuve de moralité.

Arrêt: Le pourvoi est accueilli.

La preuve est exclue.

Preuve d'expert

L'admission de la preuve d'expert repose sur l'application des critères suivants: a) la pertinence; b) la nécessité d'aider le juge des faits; c) l'absence de toute règle d'exclusion; et d) la qualification suffisante de l'expert. La pertinence est une exigence liminaire déterminée par le juge comme question de droit. La preuve logiquement pertinente peut être exclue si sa valeur probante est surpassée par son effet préjudiciable, si elle exige un temps excessivement long qui est sans commune mesure avec sa valeur ou si son effet sur le juge des faits est disproportionné par rapport à sa fiabilité. Le facteur fiabilité-effet revêt une importance particulière dans l'appréciation de l'admissibilité de la preuve d'expert. La preuve d'expert ne devrait pas être admise si elle risque d'être utilisée à mauvais escient et de fausser le processus de recherche des faits, ou de dérouter le jury.

Pour être nécessaire, la preuve d'expert doit, selon toute vraisemblance, dépasser l'expérience et la connaissance d'un juge ou d'un jury et être évaluée à la lumière de la possibilité qu'elle fausse le processus de recherche des faits. La nécessité ne devrait pas être jugée selon une norme trop stricte. La possibilité que la preuve ait un impact excessif sur le jury et le détourne de ses tâches peut souvent être contrecarrée par des directives appropriées. Les experts ne doivent toutefois pas pouvoir usurper les fonctions du juge des faits, ce qui pourrait réduire le procès à un simple concours d'experts.

La preuve d'expert peut être exclue si elle contrevient à une règle d'exclusion de la preuve, distincte de la règle applicable à l'opinion. La preuve doit être présentée par un témoin dont on démontre qu'il ou elle a acquis des connaissances spéciales ou particulières grâce à des études ou à une expérience relatives aux questions visées dans son témoignage.

In summary, expert evidence which advances a novel scientific theory or technique is subjected to special scrutiny to determine whether it meets a basic threshold of reliability and whether it is essential in the sense that the trier of fact will be unable to come to a satisfactory conclusion without the assistance of the expert. The closer the evidence approaches an opinion on an ultimate issue, the stricter the application of this principle.

En résumé, la preuve d'expert qui avance une nouvelle théorie ou technique scientifique est soigneusement examinée pour déterminer si elle satisfait à la norme de fiabilité et si elle est essentielle en ce sens que le juge des faits sera incapable de tirer une conclusion satisfaisante sans l'aide de l'expert. Plus la preuve se rapproche de l'opinion sur une question fondamentale, plus l'application de ce principe est stricte.

Expert Evidence as to Disposition

The Crown cannot lead expert evidence as to disposition in the first instance unless it is relevant to an issue and is not being used merely as evidence of disposition. The accused, however, can adduce evidence as to disposition, but this evidence is generally limited to evidence of the accused's reputation in the community with respect to the relevant trait or traits. The accused in his or her own testimony may also rely on specific acts of good conduct. Evidence of an expert witness that the accused, by reason of his or her mental make-up or condition of the mind, would be incapable of committing or disposed to commit the crime does not fit either of these categories. A further exception, however, has developed that is limited in scope. Although the exception has been applied to abnormal behaviour usually connoting sexual deviance, its underlying rationale is based on distinctiveness.

Preuve d'expert quant à la prédisposition

Le ministère public ne peut produire une preuve d'expert quant à la prédisposition que si elle est pertinente et n'est pas utilisée comme simple preuve de la prédisposition. L'accusé peut en revanche produire une preuve quant à la prédisposition, mais cette preuve se limite, en règle générale, à la preuve de la réputation de l'accusé au sein de la collectivité relativement aux traits de caractère concernés. L'accusé peut aussi invoquer dans son propre témoignage des actes particuliers de bonne conduite. Le témoignage d'un expert indiquant qu'en raison de sa constitution mentale ou de son état mental, l'accusé serait incapable de commettre le crime ou ne pourrait être prédisposé à le commettre, ne correspond à aucune de ces catégories. Cependant, une autre exception de portée limitée a été créée. Bien que cette exception ait été appliquée à des comportements anormaux liés usuellement à une déviance sexuelle, sa raison d'être est le caractère distinctif.

Before an expert's opinion as to disposition is admitted as evidence, the trial judge must be satisfied, as a matter of law, that either the perpetrator of the crime or the accused has distinctive behavioural characteristics such that a comparison of one with the other will be of material assistance in determining innocence or guilt. Although this decision is made on the basis of common sense and experience, it is not made in a vacuum. The trial judge should consider the opinion of the expert and whether the expert is merely expressing a personal opinion or whether the behavioural profile which the expert is putting forward is in common use as a reliable indicator of membership in a distinctive group. A finding that the scientific community has developed a standard profile for the offender who commits this type of crime will satisfy the criteria of relevance and necessity. The evidence will qualify as an exception to the exclusionary rule relating to character evidence provided the trial judge is satisfied that the proposed opinion is within the field of expertise of the expert witness.

Avant d'admettre en preuve l'opinion d'un expert sur la prédisposition, le juge du procès doit être convaincu, en droit, que l'auteur du crime ou l'accusé possède des caractéristiques de comportement distinctives de sorte que la comparaison de l'un avec l'autre aidera considérablement à déterminer l'innocence ou la culpabilité. Bien que cette décision repose sur le bon sens et l'expérience, elle n'est pas prise dans le vide. Le juge du procès devrait considérer, d'une part, l'opinion de l'expert et, d'autre part, si ce dernier exprime simplement une opinion personnelle ou si le profil de comportement qu'il décrit est couramment utilisé comme indice fiable de l'appartenance à un groupe distinctif. La conclusion que la profession scientifique a élaboré un profil type du délinquant qui commet ce genre de crime satisfera aux critères de pertinence et de fiabilité. La preuve sera considérée comme une exception à la règle d'exclusion relative à la preuve de moralité à condition que le juge soit convaincu que l'opinion proposée se situe dans le domaine d'expertise du témoin expert.

Application to This Case

Nothing in the record supported a finding that the profile of a paedophile or psychopath has been standardized to the extent that it could be said that it matched the supposed profile of the offender depicted in the charges. The expert's group profiles were not seen as sufficiently reliable to be considered helpful. In the absence of these indicia of reliability, it could not be said that the evidence would be necessary in the sense of usefully clarifying a matter otherwise unaccessible, or that any value it may have had would not be outweighed by its potential for misleading or diverting the jury.

The similarities detailed by the judge dealt with the perpetrator's *modus operandi* of the acts subject to the individual counts. These were not matters to which the expert evidence related. Moreover, whether a crime is committed in a manner that identifies the perpetrator by reason of striking similarities in the method employed in the commission of other acts is something that a jury can, generally, assess without the aid of expert evidence.

Cases Cited

Considered: *R. v. Lupien*, [1970] S.C.R. 263; *R. v. Chard* (1971), 56 Cr. App. R. 268; *Lowery v. The Queen*, [1974] A.C. 85; *R. v. Turner*, [1975] Q.B. 834; **referred to:** *R. v. Robertson* (1975), 21 C.C.C. (2d) 385; *R. v. McMillan* (1975), 23 C.C.C. (2d) 160, aff'd [1977] 2 S.C.R. 824; *R. v. Lavallee*, [1990] 1 S.C.R. 852; *R. v. French* (1977), 37 C.C.C. (2d) 201; *R. v. Taylor* (1986), 31 C.C.C. (3d) 1; *R. v. C. (M.H.)*, [1991] 1 S.C.R. 763; *R. v. Lyons*, [1987] 2 S.C.R. 309; *R. v. Abbey*, [1982] 2 S.C.R. 24; *R. v. B.(G.)*, [1990] 2 S.C.R. 30; *Morris v. The Queen*, [1983] 2 S.C.R. 190; *R. v. Béland*, [1987] 2 S.C.R. 398; *R. v. Melaragni* (1992), 73 C.C.C. (3d) 348; *R. v. Bourguignon*, [1991] O.J. No. 2670 (Q.L.); *R. v. Lafferty*, [1993] N.W.T.J. No. 17 (Q.L.); *Kelliher (Village of) v. Smith*, [1931] S.C.R. 672; *Director of Public Prosecutions v. Jordan*, [1977] A.C. 699; *R. v. Marquard*, [1993] 4 S.C.R. 223; *R. v. Morin*, [1988] 2 S.C.R. 345; *R. v. McNamara (No. 1)* (1981), 56 C.C.C. (2d) 193, leave to appeal refused [1981] 1 S.C.R. xi; *Thompson v. The King*, [1918] A.C. 221; *R. v. Garfinkle* (1992), 15 C.R. (4th) 254.

Statutes and Regulations Cited

Criminal Code, R.S.C., 1985, c. C-46, s. 693.

Application à l'espèce

Rien dans le dossier ne permettait de conclure que le profil du pédophile ou du psychopathe a été normalisé au point où on pourrait soutenir qu'il correspond au profil présumé du délinquant décrit dans les accusations. Les profils de groupes décrits par l'expert n'ont pas été considérés suffisamment fiables pour être utiles. En l'absence de ces indices de fiabilité, on ne pouvait pas dire que la preuve serait nécessaire au sens où elle clarifierait utilement une question qui serait autrement inaccessible, ou que la valeur qu'elle pourrait avoir ne serait pas surpassée par la possibilité qu'elle induise le jury en erreur ou le détourne de ses tâches.

Les similitudes, expliquées par le juge, portaient sur le *modus operandi* de l'auteur des actes qui étaient l'objet de chefs spécifiques. La preuve d'expert ne visait pas ces questions. De plus, la question de savoir si le crime est commis d'une manière qui identifie l'auteur, en raison de similitudes frappantes dans la méthode utilisée pour perpétrer d'autres actes, peut être appréciée en général par un jury sans l'aide de la preuve d'expert.

Jurisprudence

Arrêts examinés: *R. c. Lupien*, [1970] R.C.S. 263; *R. c. Chard* (1971), 56 Cr. App. R. 268; *Lowery c. The Queen*, [1974] A.C. 85; *R. c. Turner*, [1975] Q.B. 834; **arrêts mentionnés:** *R. c. Robertson* (1975), 21 C.C.C. (2d) 385; *R. c. McMillan* (1975), 23 C.C.C. (2d) 160, conf. par [1977] 2 R.C.S. 824; *R. c. Lavallee*, [1990] 1 R.C.S. 852; *R. c. French* (1977), 37 C.C.C. (2d) 201; *R. c. Taylor* (1986), 31 C.C.C. (3d) 1; *R. c. C. (M.H.)*, [1991] 1 R.C.S. 763; *R. c. Lyons*, [1987] 2 R.C.S. 309; *R. c. Abbey*, [1982] 2 R.C.S. 24; *R. c. B.(G.)*, [1990] 2 R.C.S. 30; *Morris c. La Reine*, [1983] 2 R.C.S. 190; *R. c. Béland*, [1987] 2 R.C.S. 398; *R. c. Melaragni* (1992), 73 C.C.C. (3d) 348; *R. c. Bourguignon*, [1991] O.J. No. 2670 (Q.L.); *R. c. Lafferty*, [1993] N.W.T.J. No. 17 (Q.L.); *Kelliher (Village of) c. Smith*, [1931] R.C.S. 672; *Director of Public Prosecutions c. Jordan*, [1977] A.C. 699; *R. c. Marquard*, [1993] 4 R.C.S. 223; *R. c. Morin*, [1988] 2 R.C.S. 345; *R. c. McNamara (No. 1)* (1981), 56 C.C.C. (2d) 193, autorisation de pourvoi refusée [1981] 1 R.C.S. xi; *Thompson c. The King*, [1918] A.C. 221; *R. c. Garfinkle* (1992), 15 C.R. (4th) 254.

Lois et règlements cités

Code criminel, L.R.C. (1985), ch. C-46, art. 693.

Authors Cited

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Cross, Rupert, Sir. *Cross on Evidence*, 7th ed. By Sir Rupert Cross and Colin Tapper. London: Butterworths, 1990.
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Mewett, Alan W. "Character as a Fact in Issue in Criminal Cases" (1984-85), 27 *Crim. L.Q.* 29.
Pattenden, Rosemary. "Conflicting Approaches to Psychiatric Evidence in Criminal Trials: England, Canada and Australia", [1986] *Crim. L.R.* 92.
Rimm, David C. and John W. Sommervill. *Abnormal Psychology*. New York: Academic Press, 1977.

APPEAL from a judgment of the Ontario Court of Appeal (1992), 8 O.R. (3d) 173, 55 O.A.C. 309, 71 C.C.C. (3d) 321, 13 C.R. (4th) 292, allowing an appeal from convictions by Berstein J. sitting with jury and ordering a new trial. Appeal allowed.

Jamie C. Klukach, for the appellant.

Brian H. Greenspan and *Sharon E. Lavine*, for the respondent.

The judgment of the Court was delivered by

SOPINKA J. — In this appeal we are required to determine under what circumstances expert evidence is admissible to show that character traits of an accused person do not fit the psychological profile of the putative perpetrator of the offences charged. Resolution of this issue involves an examination of the rules relating to expert and character evidence.

I. Facts

A. *The Events*

The respondent, a practising pediatrician in North Bay, was charged with four counts of sexual assault on four of his female patients, aged 13 to

Doctrine citée

Beven, Thomas. *Negligence in Law*, 4th ed. By William James Byrne and Andrew Dewar Gibb. London: Sweet & Maxwell, 1928.
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Mewett, Alan W. «Character as a Fact in Issue in Criminal Cases» (1984-85), 27 *Crim. L.Q.* 29.
Pattenden, Rosemary. «Conflicting Approaches to Psychiatric Evidence in Criminal Trials: England, Canada and Australia», [1986] *Crim. L.R.* 92.
Rimm, David C. and John W. Sommervill. *Abnormal Psychology*. New York: Academic Press, 1977.

POURVOI contre un arrêt de la Cour d'appel de l'Ontario (1992), 8 O.R. (3d) 173, 55 O.A.C. 309, 71 C.C.C. (3d) 321, 13 C.R. (4th) 292, qui a accueilli un appel des déclarations de culpabilité prononcées par le juge Berstein, siégeant avec jury, et ordonné un nouveau procès. Pourvoi accueilli.

Jamie C. Klukach, pour l'appelante.

Brian H. Greenspan et *Sharon E. Lavine*, pour l'intimé.

Version française du jugement de la Cour rendu par

LE JUGE SOPINKA — Nous sommes appelés à déterminer en l'espèce les circonstances dans lesquelles la preuve d'expert est admissible pour démontrer que des traits de caractère d'un accusé ne répondent pas au profil psychologique de l'auteur putatif des infractions reprochées. La résolution de la question passe par l'examen des règles en matière de preuve d'expert et de moralité.

I. Les faits

A. *Les événements*

L'intimé, un pédiatre exerçant à North Bay, fait face à quatre chefs d'accusation d'agression sexuelle sur quatre de ses patientes, âgées à

16 at the relevant time. The alleged sexual assaults were perpetrated during the course of medical examinations of the patients conducted in the respondent's office. The complainants had been referred to the respondent for conditions which were, in part, psychosomatic in nature.

Evidence relating to each complaint was admitted as similar fact evidence with respect to the others. The complainants did not know one another. Three of them came forth independently. Following a mistrial, which was publicized, the fourth victim came forward, having heard about the other charges. Three of the four complainants had been victims of prior sexual abuse. With respect to two of them, the respondent knew about their sexual abuse at the hands of others. The alleged assaults consisted of fondling of the girls' breasts and digital penetration and stimulation of their vaginal areas, accompanied by intrusive questioning of them as to their sexual activities. All of the complainants testified that the respondent did not wear gloves while examining them internally. The respondent, who testified in his own defence, denied the complainants' evidence.

At the conclusion of the respondent's examination in chief, counsel for the respondent indicated that he intended to call a psychiatrist who would testify that the perpetrator of the offences alleged to have been committed would be part of a limited and unusual group of individuals and that the respondent did not fall within that narrow class because he did not possess the characteristics belonging to that group. The Crown sought a ruling on the admissibility of that evidence. The trial judge held a *voir dire* and ruled that the evidence tendered on the *voir dire* would not be admitted.

The jury found the respondent guilty as charged on November 16, 1990. He was sentenced to nine months' imprisonment on each of the four counts, to be served concurrently, and to two years' probation. The respondent appealed his convictions and the Crown appealed the sentence. The Court of Appeal allowed the respondent's appeal, quashed the convictions and ordered a new trial. Accordingly, the Court of Appeal found it was not neces-

l'époque de 13 à 16 ans. Les agressions sexuelles auraient été commises pendant l'examen médical des patientes dans le bureau de l'intimé. Les plaignantes lui avaient été référées pour des problèmes qui, en partie, étaient de nature psychosomatique.

La preuve relative à chaque plainte a été admise comme preuve de faits similaires à l'égard des autres. Les plaignantes ne se connaissaient pas. Trois d'entre elles ont porté plainte de façon indépendante. Après l'annulation d'un procès rendu public, la quatrième victime, ayant pris connaissance des accusations, s'est fait connaître. Des quatre plaignantes, trois avaient auparavant été victimes d'abus sexuels. En outre, l'intimé savait que deux d'entre elles l'avaient été par d'autres. Les agressions alléguées consistaient à avoir caressé les seins des filles et avoir pénétré et stimulé la région vaginale avec les doigts, et à leur avoir posé des questions indiscrètes sur leurs activités sexuelles. Toutes les plaignantes ont témoigné que l'intimé ne portait pas de gants pendant l'examen interne. L'intimé, qui a témoigné pour sa propre défense, a nié les témoignages des plaignantes.

À l'issue de l'interrogatoire principal de l'intimé, l'avocat de ce dernier a exprimé l'intention d'appeler un psychiatre qui témoignerait que l'auteur des infractions alléguées appartenait à un groupe limité et inhabituel d'individus et que l'intimé ne faisait pas partie de cette catégorie restreinte parce qu'il n'en possédait pas les caractéristiques propres. Le ministère public a demandé au juge du procès de se prononcer sur l'admissibilité de cette preuve. Ce dernier a tenu un voir-dire, à la suite duquel il a conclu à l'inadmissibilité de la preuve présentée au voir-dire.

Le 16 novembre 1990, le jury a déclaré l'intimé coupable des infractions reprochées. Il a été condamné à neuf mois d'emprisonnement relativement à chacun des quatre chefs, à purger concurremment, et à deux années de probation. L'intimé a interjeté appel des déclarations de culpabilité et le ministère public a interjeté appel de la sentence. La Cour d'appel a accueilli l'appel de l'intimé, annulé les déclarations de culpabilité et ordonné un

sary to deal with the Crown's sentence appeal and refused the Crown leave to appeal.

The appellant sought leave to appeal to this Court against the decision of the Ontario Court of Appeal pursuant to s. 693 of the *Criminal Code*, R.S.C., 1985, c. C-46. On December 10, 1992 leave to appeal was granted by this Court, [1992] 3 S.C.R. viii.

B. *The Excluded Evidence*

In the *voir dire*, Dr. Hill, the expert, began his testimony by explaining that there are three general personality groups that have unusual personality traits in terms of their psychosexual profile perspective. The first group encompasses the psychosexual who suffers from major mental illnesses (*e.g.*, schizophrenia) and engages in inappropriate sexual behaviour occasionally. The second and largest group contains the sexual deviation types. This group of individuals shows distinct abnormalities in terms of the choice of individuals with whom they report sexual excitement and with whom they would like to engage in some type of sexual activity. The third group is that of the sexual psychopaths. These individuals have a callous disregard for people around them, including a disregard for the consequences of their sexual behaviour towards other individuals. Another group would include pedophiles who gain sexual excitement from young adolescents, probably pubertal or post-pubertal.

Dr. Hill identified pedophiles and sexual psychopaths as examples of members of unusual and limited classes of persons. In response to questions hypothetically encompassing the allegations of the four complainants, the expert stated that the psychological profile of the perpetrator of the first three complaints would likely be that of a pedophile, while the profile of the perpetrator of the fourth complaint would likely be that of a sexual psychopath. Dr. Hill also testified that, if but one perpetrator was involved in all four complaints described in the hypothetical questions, he would

nouveau procès. Elle a ainsi conclu qu'il n'était pas nécessaire d'entendre l'appel de la sentence interjeté par le ministère public, et a refusé à ce dernier l'autorisation d'appeler.

L'appelante a demandé à notre Cour l'autorisation de se pourvoir contre la décision de la Cour d'appel de l'Ontario conformément à l'art. 693 du *Code criminel*, L.R.C. (1985), ch. C-46. Le 10 décembre 1992, notre Cour a accordé l'autorisation, [1992] 3 R.C.S. viii.

B. *Les éléments de preuve écartés*

Lors du voir-dire, le Dr Hill, l'expert, a d'abord expliqué qu'il existait trois groupes généraux de personnalité possédant des traits de personnalité inhabituels du point de vue de leur profil psychosexuel. Le premier groupe comprend le psychosexuel qui souffre de maladie mentale grave (par exemple, la schizophrénie) et qui adopte à l'occasion un comportement sexuel inapproprié. Le deuxième groupe, le plus large, inclut les personnes ayant des déviations sexuelles. Les individus appartenant à ce groupe présentent des anomalies marquées quant au choix des personnes auxquelles ils relient l'excitation sexuelle et avec lesquelles ils aimeraient avoir une certaine forme d'activité sexuelle. Le troisième groupe comprend les psychopathes sexuels. Ils sont totalement insensibles à l'égard des gens qui les entourent, et indifférents aux conséquences de leur comportement sexuel envers autrui. Les pédophiles formeraient un quatrième groupe. Ils sont sexuellement excités par de jeunes adolescents qui sont vraisemblablement à l'âge pubertaire ou postpubertaire.

Le Dr Hill a qualifié les pédophiles et les psychopathes sexuels d'exemples d'individus membres d'une catégorie inhabituelle et restreinte de personnes. En réponse à des questions hypothétiques réunissant les allégations des quatre plaignantes, l'expert a déclaré que le profil psychologique de l'auteur des trois premières infractions serait probablement celui d'un pédophile, alors que le profil de l'auteur de la quatrième infraction serait probablement celui d'un psychopathe sexuel. Le Dr Hill a également témoigné que, si un seul auteur était impliqué relativement aux quatre

uniquely categorize that perpetrator as a sexual psychopath. He added that such a person would belong to a very small, behaviourally distinct category of persons. Dr. Hill was asked whether a physician who acted in the manner described in the hypothetical questions would be a member of a distinct group of aberrant persons. His answer was that such behaviours could only flow from a significant abnormality of character and would be part of an unusual and limited class. In cross-examination, Dr. Hill said: "You bring an extra abnormal, extra component for the abnormality when you talk about a physician in his or her office." According to Dr. Hill, physicians who were also sexual offenders would be a small group because not only would they be breaking the usual norms of society, but they would also be breaking out against the norms of the medical profession which are very strict given the intimate contact necessary to treat patients. It was contemplated that Dr. Hill would go on to testify "to the effect that Doctor Mohan does not have the characteristics attributable to any of the three groups in which most sex offenders fall."

II. Judgments Below

A. *High Court of Justice* (Ruling on *Voir Dire*) (Bernstein J.)

In ruling on the admissibility of Dr. Hill's evidence, the trial judge stated the issues as follows:

> One: Did the offences alleged to have been committed by the accused have unusual features which would indicate that anyone who committed them was a member of a limited and distinguishable group?
>
> Two: Did the psychiatrist have the necessary qualifications and expertise to venture an opinion on the first issue so as to be helpful to the jury?

The trial judge noted that Dr. Hill had personally interviewed and treated three doctors who engaged in criminal sexual misconduct with their patients. He also noted that Dr. Hill admitted that

plaintes décrites dans les questions hypothétiques, il le qualifierait de psychopathe sexuel uniquement. Il a ajouté qu'une telle personne appartiendrait à un groupe très restreint de personnes distinctes du point de vue de leur comportement. On a demandé au Dr Hill si un médecin agissant de la manière décrite dans les questions hypothétiques ferait partie d'un groupe distinct de personnes anormales. Il a répondu que de tels comportements ne pouvaient que découler d'une grave anomalie du caractère et feraient partie d'une catégorie inhabituelle et restreinte. En contre-interrogatoire, le Dr Hill a dit: [TRADUCTION] «Vous apportez une anomalie supplémentaire, un élément supplémentaire d'anomalie lorsque vous parlez d'un médecin dans son bureau.» Selon le Dr Hill, les médecins qui sont également des délinquants sexuels seraient peu nombreux parce que non seulement ils violent les normes ordinaires de la société, mais aussi les normes de la profession médicale, qui sont très strictes étant donné le contact intime inhérent au traitement des patients. On prévoyait que le Dr Hill témoignerait ensuite [TRADUCTION] «que le Dr Mohan ne possède pas les caractéristiques attribuables à l'un des trois groupes auxquels appartiennent la plupart des délinquants sexuels.»

II. Les juridictions inférieures

A. *La Haute Cour de Justice* (décision relativement au voir-dire) (le juge Bernstein)

En se prononçant sur l'admissibilité du témoignage du Dr Hill, le juge du procès a formulé ainsi les questions en litige:

[TRADUCTION]

> (1) Les infractions imputées à l'accusé avaient-elles des caractéristiques inhabituelles indiquant que quiconque les a commises appartient à un groupe restreint et distinctif?
>
> (2) Le psychiatre possédait-il les compétences et l'expérience nécessaires pour exprimer sur la première question une opinion qui soit utile au jury?

Le juge du procès a signalé que le Dr Hill avait lui-même interrogé et traité trois médecins ayant eu un comportement sexuel criminel avec leurs patients. Il a également signalé que le Dr Hill avait

he was not aware of any scientific study or literature related to the psychiatric make-up of doctors who sexually abuse their patients and that his experience with three admitted offenders who were doctors was not a sufficient basis to allow him to make any generalizations on the subject. Dr. Hill acknowledged that he, as a psychiatrist, is unable to diagnose individuals as having the distinct characteristics of a pedophile or of a homosexual until the patient has performed an overt act which suggests the existence of the characteristic.

admis qu'il ne connaissait aucune étude ou documentation scientifique relative au portrait psychiatrique des médecins qui abusent sexuellement de leurs patients, et que son expérience acquise auprès des trois délinquants reconnus, qui étaient des médecins, ne lui permettait pas de faire des généralisations sur le sujet. Le Dr Hill a reconnu qu'à titre de psychiatre, il n'était pas en mesure de diagnostiquer chez des individus les caractéristiques distinctes d'un pédophile ou d'un homosexuel, tant que le patient n'avait pas commis d'acte manifeste pouvant indiquer l'existence de la caractéristique.

The trial judge reviewed the case law in which the use of such psychiatric evidence had been discussed (*i.e., R. v. Lupien*, [1970] S.C.R. 263; *R. v. Robertson* (1975), 21 C.C.C. (2d) 385 (Ont. C.A.); *R. v. McMillan* (1975), 23 C.C.C. (2d) 160 (Ont. C.A.); *R. v. Lavallee*, [1990] 1 S.C.R. 852; *R. v. French* (1977), 37 C.C.C. (2d) 201 (Ont. C.A.); *R. v. Taylor* (1986), 31 C.C.C. (3d) 1 (Ont. C.A.)). From these cases, the trial judge concluded that the use of psychiatric evidence has been greatly expanded since *R. v. Lupien*. He cited the following words of Martin J.A. in *R. v. Robertson* (at p. 423):

Le juge du procès a passé en revue la jurisprudence dans laquelle l'utilisation de la preuve psychiatrique a été analysée (p. ex., *R. c. Lupien*, [1970] R.C.S. 263; *R. c. Robertson* (1975), 21 C.C.C. (2d) 385 (C.A. Ont.); *R. c. McMillan* (1975), 23 C.C.C. (2d) 160 (C.A. Ont.); *R. c. Lavallee*, [1990] 1 R.C.S. 852; *R. c. French* (1977), 37 C.C.C. (2d) 201 (C.A. Ont.); *R. c. Taylor* (1986), 31 C.C.C. (3d) 1 (C.A. Ont.)). Fort de ces arrêts, le juge du procès a conclu que l'utilisation de la preuve psychiatrique a considérablement été élargie depuis l'arrêt *R. c. Lupien*. Il a repris les propos suivants du juge Martin de la Cour d'appel dans l'arrêt *R. c. Robertson* (à la p. 423):

> Evidence that the offence has distinctive features which identified the perpetrator as a person possessing unusual personality traits constituting him a member of an unusual and limited class of persons would render admissible evidence that the accused did not possess the personality characteristics of the class of persons to which the perpetrator of the crime belonged.

> [TRADUCTION] La preuve que l'infraction présente des caractéristiques distinctives qui identifient l'auteur du crime comme une personne possédant des traits de personnalité inhabituels, qui le rattachent ainsi à une catégorie inhabituelle et restreinte de personnes, rendrait admissible la preuve que l'accusé ne possédait pas les traits de personnalité propres à la catégorie à laquelle l'auteur du crime appartient.

The trial judge also relied on the following passage of *R. v. McMillan* (at p. 175):

Le juge du procès a également invoqué le passage suivant de l'arrêt *R. c. McMillan* (à la p. 175):

> I leave open, until the question is required to be decided, whether when the crime is one assumed to be committed by normal persons, *e.g.*, rape, psychiatric evidence is admissible to show that the accused is a member of an abnormal group, possessing characteristics which make it improbable that he committed the offence, *e.g.*, that he is a homosexual with an aversion to heterosexual relations. I am disposed, however, to think that such evidence is admissible.

> [TRADUCTION] Je laisse ouverte, jusqu'à ce qu'elle doive être tranchée, la question de savoir, lorsqu'un crime, comme le viol, est présumé être commis par des personnes normales, si la preuve psychiatrique est admissible pour établir que l'accusé fait partie d'un groupe anormal possédant des caractéristiques en raison desquelles il est peu probable qu'il ait commis l'infraction, comme le fait qu'il soit un homosexuel ayant une aversion pour les relations hétérosexuelles. Je suis toutefois disposé à penser qu'une telle preuve est admissible.

After relying on *R. v. McMillan*, the trial judge held:

Doctor Hill is of the opinion that sexual assault is a crime committed by a distinguishable group. As I read the cases, I came to the conclusion that it is the size and the degree of distinctiveness of the "unusual and limited class of persons" which determines whether expert opinion will be helpful in defining the class and categorizing accused persons within or without the group. These days it is trite to say that a large number of men from all walks of life commit sexual offences on young women. While all may have some type of character disorder, I doubt that expert evidence regarding the normality of any given accused would be of assistance to a trier of fact absent some more distinguishing within the wide spectrum of sexual assault.

The evidence of Doctor Hill is not sufficient, I believe, to establish that doctors who commit sexual assaults on patients are in a significantly more limited group in psychiatric terms than are other members of society. There is no scientific data available to warrant that conclusion. A sample of three offenders is not a sufficient basis for such a conclusion. Even the allegations of the fourth complainant . . . are not so unusual, as sex offenders go, to warrant a conclusion that the perpetrator must have belonged to a sufficiently narrow class.

I conclude that if the evidence was received as proposed, it would merely be character evidence of a type that is inadmissible as going beyond evidence of general reputation, and does not fall within the proper sphere of expert evidence.

B. *Ontario Court of Appeal* (1992), 8 O.R. (3d) 173

It was apparent for Finlayson J.A., who wrote the court's judgment, that the trial judge's conclusions were based on a misapprehension of the evidence of Dr. Hill. Finlayson J.A. stated that Dr. Hill did not base his opinion on case studies of the three physicians he had as patients who were accused of sexual crimes. Rather, Finlayson J.A. was of the view at p. 177 that, in concluding that the perpetrators in the hypothetical examples would fall into an unusual and limited class of persons, and that, if the perpetrator were a physician, the class into which he would fall would be even

Après avoir invoqué l'arrêt *R. c. McMillan*, le juge du procès a déclaré:

[TRADUCTION] Selon le Docteur Hill, l'agression sexuelle est un crime commis par un groupe distinctif. Compte tenu de la jurisprudence, je conclus que c'est l'importance et le degré de distinction de la «catégorie inhabituelle et restreinte de personnes» qui détermine si l'opinion d'un expert contribuera à définir la catégorie et à inclure les accusés dans ce groupe ou à les en exclure. Il va sans dire qu'un grand nombre d'hommes de tous les milieux commettent des infractions sexuelles sur de jeunes femmes. S'il se peut que tous souffrent d'une forme de désordre mental, je doute que la preuve d'expert portant sur la normalité d'un accusé soit utile au juge des faits en l'absence d'un élément plus distinctif se situant à l'intérieur du large spectre de l'agression sexuelle.

À mon avis, le témoignage du Docteur Hill ne suffit pas à établir que les médecins qui agressent sexuellement leurs patients forment un groupe beaucoup plus restreint sur le plan psychiatrique que les autres membres de la société. Aucune donnée scientifique ne justifie cette conclusion. Un échantillon de trois délinquants ne suffit pas comme fondement à une telle conclusion. Même les allégations de la quatrième plaignante [. . .] ne sont pas inhabituelles, en ce qui concerne les délinquants sexuels, au point de justifier la conclusion que l'auteur du crime devait appartenir à une catégorie suffisamment restreinte.

Je conclus que, si la preuve proposée était admise, elle ne serait qu'une preuve de moralité sous une forme inadmissible puisqu'elle excède la preuve de la réputation générale, et qu'elle n'entre pas dans la sphère de la preuve d'expert.

B. *La Cour d'appel de l'Ontario* (1992), 8 O.R. (3d) 173

Il était évident pour le juge Finlayson, qui s'est prononcé au nom de la cour, que le juge du procès avait tiré des conclusions fondées sur une mauvaise compréhension du témoignage du Dr Hill. Le juge Finlayson a déclaré que l'opinion du Dr Hill ne reposait pas sur le cas des trois médecins qu'il avait traités et qui avaient été accusés de crimes sexuels. Au contraire, le juge Finlayson s'est dit d'avis, à la p. 177, que pour conclure que les auteurs, dans les exemples hypothétiques, tomberaient dans une catégorie inhabituelle et restreinte de personnes et que, si l'auteur du crime était un

narrower, Dr. Hill based his opinion on all of his experience:

With respect, I think the learned trial judge was in error, in that he ruled on the sufficiency of the evidence of Dr. Hill, not its admissibility. It was up to the jury to consider what weight should be given to the expert opinion. Crown counsel suggested on appeal that the trial judge was ruling on the qualifications of the expert witness to give the opinion that he did. I do not think that is a correct interpretation of the trial judge's reasons. Dr. Hill's qualifications are outstanding and no attempt was made at trial to challenge them. I think the trial judge was saying that Dr. Hill's personal experience in dealing with sex-offending physicians and the lack of scientific literature specific to such physicians did not justify Dr. Hill giving the opinion that he did. In my opinion, in restricting his interpretation of Dr. Hill's testimony to "doctors who commit sexual assaults on patients", the trial judge misapprehended the opinion of Dr. Hill and the broad psychiatric experience upon which it was based.

Finlayson J.A. went on to say that the evidence of Dr. Hill was admissible on two bases. On the first basis, given that similar fact evidence was admitted showing that the acts compared are so unusual and strikingly similar that their similarities cannot be attributed to coincidence, Dr. Hill's testimony was admissible to show that the offences alleged were unlikely to have been committed by the same person (*R. v. C. (M.H.)*, [1991] 1 S.C.R. 763).

On the second basis, it was admissible to show that the respondent was not a member of either of the unusual groups of aberrant personalities which could have committed the offenses alleged. Referring to *R. v. Lupien*, *supra*, at pp. 275-78, *R. v. Robertson*, *supra*, at p. 425, and *R. v. McMillan*, *supra*, Finlayson J.A. held that it is settled law that opinion evidence showing that the accused did or did not possess the distinguishing characteristics of an abnormal group is admissible in a criminal case, where it would appear that the perpetrator of the crime alleged is a person with an abnormal propensity or disposition which stamps him or her as being a member of that special and extraordi-

médecin, la catégorie à laquelle il appartiendrait serait encore plus restreinte, le Dr Hill a fondé son opinion sur son expérience générale:

[TRADUCTION] Avec égards, j'estime que le juge du procès a commis une erreur puisqu'il s'est prononcé sur la suffisance du témoignage du Dr Hill et non sur son admissibilité. Il appartenait au jury d'apprécier la valeur de l'opinion d'expert. Le ministère public a donné à entendre en appel que le juge du procès se prononçait sur les compétences du témoin expert pour exprimer l'opinion en cause. Je ne crois pas qu'il s'agisse là d'une interprétation juste des motifs du juge du procès. Les compétences du Dr Hill sont remarquables et personne n'a tenté de les contester au procès. À mon avis, le juge du procès affirmait que l'expérience personnelle du Dr Hill acquise auprès des médecins auteurs d'infractions sexuelles, d'une part, et l'absence de documentation scientifique sur de tels médecins, d'autre part, ne permettaient pas au Dr Hill d'exprimer l'opinion en cause. À mon avis, en restreignant aux «médecins qui agressent sexuellement leurs patients» son interprétation de l'opinion du Dr Hill, le juge du procès a mal interprété celle-ci et la grande expérience psychiatrique sur laquelle elle est fondée.

Le juge Finlayson a ensuite ajouté que le témoignage du Dr Hill était admissible pour deux motifs. D'une part, étant donné que la preuve de faits similaires admise démontre que les actes comparés sont si inhabituels et d'une similitude si frappante qu'on ne peut attribuer celle-ci à la coïncidence, le témoignage du Dr Hill était admissible pour démontrer qu'il était peu probable que les infractions alléguées aient été commises par la même personne (*R. c. C. (M.H.)*, [1991] 1 R.C.S. 763).

Par ailleurs, il était admissible pour démontrer que l'intimé n'était pas membre des groupes inhabituels de personnalités anormales qui auraient pu commettre les infractions alléguées. Invoquant les arrêts *R. c. Lupien*, précité, aux pp. 275 à 278; *R. c. Robertson*, précité, à la p. 425 et *R. c. McMillan*, précité, le juge Finlayson a conclu qu'il est établi en droit que le témoignage d'opinion qui démontre que l'accusé possédait ou ne possédait pas les caractéristiques distinctives d'un groupe anormal est admissible dans une affaire criminelle lorsqu'il appert que l'auteur du crime reproché a une propension ou une prédisposition anormale qui indique qu'il est membre de cette catégorie (ou

nary class (or group). In this case, the psychiatrist showed that pedophiles and sexual psychopaths are members of special and extraordinary classes. Considering also the issues put to the jury in the case at bar (complex psychological issues, testimonial trustworthiness), Finlayson J.A. held that evidence of persons with professional psychiatric experience in dealing with sexual offences would be of assistance (based on: *R. v. Lyons*, [1987] 2 S.C.R. 309; *R. v. Abbey*, [1982] 2 S.C.R. 24; *R. v. Lavallee*, *supra*; *R. v. B.(G.)*, [1990] 2 S.C.R. 30).

The court allowed the respondent's appeal, quashed the convictions and ordered a new trial. Accordingly, the Court of Appeal refused leave to the Crown's sentence appeal.

III. Analysis

The admissibility of the rejected evidence was analyzed in argument under two exclusionary rules of evidence: (1) expert opinion evidence, and (2) character evidence. I have concluded that, on the basis of the principles relating to exceptions to the character evidence rule and under the principles governing the admissibility of expert evidence, the limitations on the use of this type of evidence require that the evidence in this case be excluded.

(1) *Expert Opinion Evidence*

Admission of expert evidence depends on the application of the following criteria:

(a) relevance;

(b) necessity in assisting the trier of fact;

(c) the absence of any exclusionary rule;

(d) a properly qualified expert.

(a) Relevance

Relevance is a threshold requirement for the admission of expert evidence as with all other evidence. Relevance is a matter to be decided by a judge as question of law. Although *prima facie* admissible if so related to a fact in issue that it

groupe) spéciale et extraordinaire. En l'espèce, le psychiatre a démontré que les pédophiles et les psychopathes sexuels appartiennent à des catégories spéciales et extraordinaires. Tenant compte également des questions soumises au jury en l'espèce (questions psychologiques complexes, fiabilité du témoignage), le juge Finlayson a conclu que le témoignage de personnes dotées d'une expérience psychiatrique professionnelle dans le domaine des infractions sexuelles serait utile (fondé sur: *R. c. Lyons*, [1987] 2 R.C.S. 309; *R. c. Abbey*, [1982] 2 R.C.S. 24; *R. c. Lavallee*, précité; *R. c. B.(G.)*, [1990] 2 R.C.S. 30).

La cour a accueilli l'appel de l'intimé, annulé les déclarations de culpabilité et ordonné un nouveau procès. Elle n'a donc pas autorisé le ministère public à en appeler de la sentence.

III. Analyse

L'admissibilité de la preuve écartée a été analysée en plaidoirie au regard de deux règles d'exclusion de la preuve: (1) le témoignage d'opinion d'un expert et (2) la preuve de moralité. Compte tenu des principes qui gouvernent les exceptions à la règle en matière de preuve de moralité et de ceux qui gouvernent l'admissibilité de la preuve d'expert, j'ai conclu que les restrictions imposées à l'utilisation de ce type de preuve exigent d'écarter le témoignage en l'espèce.

(1) *Témoignage d'opinion d'un expert*

L'admission de la preuve d'expert repose sur l'application des critères suivants:

a) la pertinence;

b) la nécessité d'aider le juge des faits;

c) l'absence de toute règle d'exclusion;

d) la qualification suffisante de l'expert.

a) La pertinence

Comme pour toute autre preuve, la pertinence est une exigence liminaire pour l'admission d'une preuve d'expert. La pertinence est déterminée par le juge comme question de droit. Bien que la preuve soit admissible à première vue si elle est à

tends to establish it, that does not end the inquiry. This merely determines the logical relevance of the evidence. Other considerations enter into the decision as to admissibility. This further inquiry may be described as a cost benefit analysis, that is "whether its value is worth what it costs." See *McCormick on Evidence* (3rd ed. 1984), at p. 544. Cost in this context is not used in its traditional economic sense but rather in terms of its impact on the trial process. Evidence that is otherwise logically relevant may be excluded on this basis, if its probative value is overborne by its prejudicial effect, if it involves an inordinate amount of time which is not commensurate with its value or if it is misleading in the sense that its effect on the trier of fact, particularly a jury, is out of proportion to its reliability. While frequently considered as an aspect of legal relevance, the exclusion of logically relevant evidence on these grounds is more properly regarded as a general exclusionary rule (see *Morris v. The Queen*, [1983] 2 S.C.R. 190). Whether it is treated as an aspect of relevance or an exclusionary rule, the effect is the same. The reliability versus effect factor has special significance in assessing the admissibility of expert evidence.

ce point liée au fait concerné qu'elle tend à l'établir, l'analyse ne se termine pas là. Cela établit seulement la pertinence logique de la preuve. D'autres considérations influent également sur la décision relative à l'admissibilité. Cet examen supplémentaire peut être décrit comme une analyse du coût et des bénéfices, à savoir «si la valeur en vaut le coût.» Voir *McCormick on Evidence* (3e éd. 1984), à la p. 544. Le coût dans ce contexte n'est pas utilisé dans le sens économique traditionnel du terme, mais plutôt par rapport à son impact sur le procès. La preuve qui est par ailleurs logiquement pertinente peut être exclue sur ce fondement si sa valeur probante est surpassée par son effet préjudiciable, si elle exige un temps excessivement long qui est sans commune mesure avec sa valeur ou si elle peut induire en erreur en ce sens que son effet sur le juge des faits, en particulier le jury, est disproportionné par rapport à sa fiabilité. Bien qu'elle ait été fréquemment considérée comme un aspect de la pertinence juridique, l'exclusion d'une preuve logiquement pertinente, pour ces raisons, devrait être considérée comme une règle générale d'exclusion (voir *Morris c. La Reine*, [1983] 2 R.C.S. 190). Qu'elle soit traitée comme un aspect de la pertinence ou une règle d'exclusion, son effet est le même. Ce facteur fiabilité-effet revêt une importance particulière dans l'appréciation de l'admissibilité de la preuve d'expert.

There is a danger that expert evidence will be misused and will distort the fact-finding process. Dressed up in scientific language which the jury does not easily understand and submitted through a witness of impressive antecedents, this evidence is apt to be accepted by the jury as being virtually infallible and as having more weight than it deserves. As La Forest J. stated in *R. v. Béland*, [1987] 2 S.C.R. 398, at p. 434, with respect to the evidence of the results of a polygraph tendered by the accused, such evidence should not be admitted by reason of "human fallibility in assessing the proper weight to be given to evidence cloaked under the mystique of science". The application of this principle can be seen in cases such as *R. v. Melaragni* (1992), 73 C.C.C. (3d) 348, in which Moldaver J. applied a threshold test of reliability to what he described, at p. 353, as "a new scientific

La preuve d'expert risque d'être utilisée à mauvais escient et de fausser le processus de recherche des faits. Exprimée en des termes scientifiques que le jury ne comprend pas bien et présentée par un témoin aux qualifications impressionnantes, cette preuve est susceptible d'être considérée par le jury comme étant pratiquement infaillible et comme ayant plus de poids qu'elle ne le mérite. Comme le juge La Forest l'a dit dans l'arrêt *R. c. Béland*, [1987] 2 R.C.S. 398, à la p. 434, relativement au témoignage sur les résultats d'un détecteur de mensonges produits par l'accusé, une telle preuve ne devrait pas être admise en raison de «la faillibilité humaine dans l'évaluation du poids à donner à la preuve empreinte de la mystique de la science». On a appliqué ce principe dans des décisions comme *R. c. Melaragni* (1992), 73 C.C.C. (3d) 348, dans laquelle le juge Moldaver a appliqué un

technique or body of scientific knowledge". Moldaver J. also mentioned two other factors, *inter alia*, which should be considered in such circumstances (at p. 353):

(1) Is the evidence likely to assist the jury in its fact-finding mission, or is it likely to confuse and confound the jury?

(2) Is the jury likely to be overwhelmed by the "mystic infallibility" of the evidence, or will the jury be able to keep an open mind and objectively assess the worth of the evidence?

A similar approach was adopted in *R. v. Bourguignon*, [1991] O.J. No. 2670 (Q.L.), where, in ruling upon a *voir dire* concerning the admissibility of D.N.A. evidence, Flanigan J. admitted most of the evidence but excluded statistical evidence about the probability of a match between the DNA contained in samples taken from the accused and those taken from the scene of a crime. The learned judge explained:

This Court does not think that the criminal jurisdiction of Canada is yet ready to put such an additional pressure on a jury, by making them overcome such fantastic odds and asking them to weigh it as just one piece of evidence to be considered in the overall picture of all the evidence presented. There is a real danger that the jury will use the evidence as a measure of the probability of the accused's guilt or innocence and thereby undermine the presumption of innocence and erode the value served by the reasonable doubt standard. As said in the Schwartz case: "dehumanize our justice system".

I would therefore, rule admissible the D.N.A. testing evidence but not the statistic probabilities. This restriction can be easily overcome by evidence that "such matches are rare" or "extremely rare" or words to the same effect, which will put the jury in a better position to assess such evidence and protect the right of the accused to a fair trial.

It should be noted that, subsequently, other courts have rejected the distinction drawn by Flanigan J. and have admitted both DNA evidence and the evi-

critère préliminaire de fiabilité à ce qu'il a qualifié de [TRADUCTION] «nouvelle technique ou discipline scientifique» (p. 353). Le juge Moldaver a également mentionné deux facteurs, entre autres, qui devraient être considérés dans de telles circonstances (à la p. 353):

[TRADUCTION]

(1) La preuve est-elle susceptible de faciliter la tâche de recherche des faits du jury, ou susceptible de l'embrouiller et de le dérouter?

(2) Le jury est-il susceptible d'être écrasé par l'«infaillibilité mystique» de la preuve, ou sera-t-il capable de garder l'esprit ouvert et d'en apprécier objectivement la valeur?

Un point de vue semblable a été adopté dans la décision *R. c. Bourguignon*, [1991] O.J. No. 2670 (Q.L.) où, se prononçant sur un voir-dire concernant l'admissibilité de la preuve d'ADN, le juge Flanigan a admis la plus grande partie de la preuve en excluant toutefois les statistiques sur la probabilité que l'ADN prélevé sur des échantillons recueillis sur l'accusé concorde avec celui prélevé sur la scène du crime. Le juge s'est exprimé ainsi:

[TRADUCTION] Notre Cour ne croit pas que la juridiction criminelle au Canada soit prête à imposer une pression supplémentaire aux membres du jury en exigeant d'eux qu'ils surmontent des obstacles aussi énormes et qu'ils la pondèrent comme un simple élément de preuve à examiner dans le cadre de l'ensemble de la preuve produite. Il y a un danger réel que le jury utilise la preuve comme une mesure de la probabilité de la culpabilité ou de l'innocence de l'accusé et que cela mine la présomption d'innocence et la valeur que présente la norme du doute raisonnable. Comme on l'a dit dans l'affaire Schwartz, «déshumaniser notre système de justice».

Je déclarerais par conséquent admissible la preuve de l'analyse d'A.D.N., mais pas les probabilités statistiques. Cette restriction peut facilement être surmontée par la preuve qu'«une telle concordance est rare» ou «extrêmement rare» ou par une formulation de ce genre, ce qui permettra au jury de mieux apprécier la preuve en question et protégera le droit de l'accusé à un procès équitable.

Il y a lieu de signaler que, par la suite, d'autres tribunaux ont rejeté la distinction établie par le juge Flanigan et ont admis tant la preuve d'ADN que la

dence regarding statistical probabilities of a match. (See, *e.g.*, *R. v. Lafferty*, [1993] N.W.T.J. No. 17 (Q.L.)). I rely on *R. v. Bourguignon*, *supra*, simply to illustrate the mode of approach adopted there and leave the specific issue decided by Flanigan J. to be considered when it arises.

(b) Necessity in Assisting the Trier of Fact

In *R. v. Abbey*, *supra*, Dickson J., as he then was, stated, at p. 42:

> With respect to matters calling for special knowledge, an expert in the field may draw inferences and state his opinion. An expert's function is precisely this: to provide the judge and jury with a ready-made inference which the judge and jury, due to the technical nature of the facts, are unable to formulate. "An expert's opinion is admissible to furnish the Court with scientific information which is likely to be outside the experience and knowledge of a judge or jury. If on the proven facts a judge or jury can form their own conclusions without help, then the opinion of the expert is unnecessary" (*Turner* (1974), 60 Crim. App. R. 80, at p. 83, *per* Lawton L.J.)

This pre-condition is often expressed in terms as to whether the evidence would be helpful to the trier of fact. The word "helpful" is not quite appropriate and sets too low a standard. However, I would not judge necessity by too strict a standard. What is required is that the opinion be necessary in the sense that it provide information "which is likely to be outside the experience and knowledge of a judge or jury": as quoted by Dickson J. in *R. v. Abbey*, *supra*. As stated by Dickson J., the evidence must be necessary to enable the trier of fact to appreciate the matters in issue due to their technical nature. In *Kelliher (Village of) v. Smith*, [1931] S.C.R. 672, at p. 684, this Court, quoting from *Beven on Negligence* (4th ed. 1928), at p. 141, stated that in order for expert evidence to be admissible, "[t]he subject-matter of the inquiry must be such that ordinary people are unlikely to form a correct judgment about it, if unassisted by persons with special knowledge". More recently, in *R. v. Lavallee*, *supra*, the above passages from *Kelliher* and *Abbey* were applied to admit expert

preuve relative aux probabilités statistiques d'une concordance. (Voir, p. ex., *R. c. Lafferty*, [1993] N.W.T.J. No. 17 (Q.L.)). Je m'appuie sur l'arrêt *R. c. Bourguignon*, précité, seulement pour illustrer la méthode adoptée dans cette affaire et je laisse la question précise tranchée par le juge Flanigan à considérer quand elle sera soulevée.

b) La nécessité d'aider le juge des faits

Dans l'arrêt *R. c. Abbey*, précité, le juge Dickson, plus tard Juge en chef, a dit à la p. 42:

> Quant aux questions qui exigent des connaissances particulières, un expert dans le domaine peut tirer des conclusions et exprimer son avis. Le rôle d'un expert est précisément de fournir au juge et au jury une conclusion toute faite que ces derniers, en raison de la technicité des faits, sont incapables de formuler. [TRADUCTION] «L'opinion d'un expert est recevable pour donner à la cour des renseignements scientifiques qui, selon toute vraisemblance, dépassent l'expérience et la connaissance d'un juge ou d'un jury. Si, à partir des faits établis par la preuve, un juge ou un jury peut à lui seul tirer ses propres conclusions, alors l'opinion de l'expert n'est pas nécessaire» (*Turner* (1974), 60 Crim. App. R. 80, à la p. 83, le lord juge Lawton).

Cette condition préalable est fréquemment reprise dans la question de savoir si la preuve serait utile au juge des faits. Le mot «utile» n'est pas tout à fait juste car il établit un seuil trop bas. Toutefois, je ne jugerais pas la nécessité selon une norme trop stricte. L'exigence est que l'opinion soit nécessaire au sens qu'elle fournit des renseignements «qui, selon toute vraisemblance, dépassent l'expérience et la connaissance d'un juge ou d'un jury»: cité par le juge Dickson, dans *Abbey*, précité. Comme le juge Dickson l'a dit, la preuve doit être nécessaire pour permettre au juge des faits d'apprécier les questions en litige étant donné leur nature technique. Dans l'arrêt *Kelliher (Village of) c. Smith*, [1931] R.C.S. 672, à la p. 684, notre Cour, citant *Beven on Negligence* (4e éd. 1928) à la p. 141, a déclaré que la preuve d'expert était admissible si [TRADUCTION] «l'objet de l'analyse est tel qu'il est peu probable que des personnes ordinaires puissent former un jugement juste à cet égard sans l'assistance de personnes possédant des connaissances spéciales». Plus récemment, dans

evidence as to the state of mind of a "battered" woman. The judgment stressed that this was an area that is not understood by the average person.

As in the case of relevance, discussed above, the need for the evidence is assessed in light of its potential to distort the fact-finding process. As stated by Lawton L.J. in *R. v. Turner*, [1975] Q.B. 834, at p. 841, and approved by Lord Wilberforce in *Director of Public Prosecutions v. Jordan*, [1977] A.C. 699, at p. 718:

"An expert's opinion is admissible to furnish the court with scientific information which is likely to be outside the experience and knowledge of a judge or jury. If on the proven facts a judge or jury can form their own conclusions without help, then the opinion of an expert is unnecessary. In such a case if it is given dressed up in scientific jargon it may make judgment more difficult. The fact that an expert witness has impressive scientific qualifications does not by that fact alone make his opinion on matters of human nature and behaviour within the limits of normality any more helpful than that of the jurors themselves; but there is a danger that they may think it does."

The possibility that evidence will overwhelm the jury and distract them from their task can often be offset by proper instructions.

There is also a concern inherent in the application of this criterion that experts not be permitted to usurp the functions of the trier of fact. Too liberal an approach could result in a trial's becoming nothing more than a contest of experts with the trier of fact acting as referee in deciding which expert to accept.

These concerns were the basis of the rule which excluded expert evidence in respect of the ultimate issue. Although the rule is no longer of general application, the concerns underlying it remain. In light of these concerns, the criteria of relevance and necessity are applied strictly, on occasion, to exclude expert evidence as to an ultimate issue.

l'arrêt *R. c. Lavallee*, précité, les passages précités des arrêts *Kelliher* et *Abbey* ont été appliqués pour admettre une preuve d'expert sur l'état d'esprit d'une femme «battue». On a souligné qu'il s'agissait là d'un domaine que la personne ordinaire ne comprend pas.

Comme la pertinence, analysée précédemment, la nécessité de la preuve est évaluée à la lumière de la possibilité qu'elle fausse le processus de recherche des faits. Comme le lord juge Lawton l'a remarqué dans l'arrêt *R. c. Turner*, [1975] Q.B. 834, à la p. 841, qui a été approuvé par lord Wilberforce dans l'arrêt *Director of Public Prosecutions c. Jordan*, [1977] A.C. 699, à la p. 718:

[TRADUCTION] «L'opinion d'un expert est recevable pour donner à la cour des renseignements scientifiques qui, selon toute vraisemblance, dépassent l'expérience et la connaissance d'un juge ou d'un jury. Si, à partir des faits établis par la preuve, un juge ou un jury peut à lui seul tirer ses propres conclusions, alors l'opinion de l'expert n'est pas nécessaire. Dans un tel cas, si elle est exprimée dans un jargon scientifique, elle rend la tâche de juger plus difficile. Le seul fait qu'un témoin expert possède des qualifications scientifiques impressionnantes ne signifie pas que son opinion sur les questions de la nature et du comportement humains dans le cadre de la normalité est plus utile que celle des jurés eux-mêmes; ces derniers risquent toutefois de croire qu'elle l'est.»

La possibilité que la preuve ait un impact excessif sur le jury et le détourne de ses tâches peut souvent être contrecarrée par des directives appropriées.

Il y a également la crainte inhérente à l'application de ce critère que les experts ne puissent usurper les fonctions du juge des faits. Une conception trop libérale pourrait réduire le procès à un simple concours d'experts, dont le juge des faits se ferait l'arbitre en décidant quel expert accepter.

Ces préoccupations sont le fondement de la règle d'exclusion de la preuve d'expert relativement à une question fondamentale. Bien que la règle ne soit plus d'application générale, les préoccupations qui la sous-tendent demeurent. En raison de ces préoccupations, les critères de pertinence et de nécessité sont à l'occasion appliqués strictement

Expert evidence as to credibility or oath-helping has been excluded on this basis. See *R. v. Marquard*, [1993] 4 S.C.R. 223, *per* McLachlin J.

pour exclure la preuve d'expert sur une question fondamentale. La preuve d'expert sur la crédibilité ou la justification a été exclue pour ce motif. Voir l'arrêt *R. c. Marquard*, [1993] 4 R.C.S. 223, les motifs du juge McLachlin.

(c) The Absence of any Exclusionary Rule

Compliance with criteria (a), (b) and (d) will not ensure the admissibility of expert evidence if it falls afoul of an exclusionary rule of evidence separate and apart from the opinion rule itself. For example, in *R. v. Morin*, [1988] 2 S.C.R. 345, evidence elicited by the Crown in cross-examination of the psychiatrist called by the accused was inadmissible because it was not shown to be relevant other than as to the disposition to commit the crime charged. Notwithstanding, therefore, that the evidence otherwise complied with the criteria for the admission of expert evidence it was excluded by reason of the rule that prevents the Crown from adducing evidence of the accused's disposition unless the latter has placed his or her character in issue. The extent of the restriction when such evidence is tendered by the accused lies at the heart of this case and will be discussed hereunder.

c) L'absence de toute règle d'exclusion

Le respect des critères a), b) et d) n'assurera pas l'admissibilité de la preuve d'expert si celle-ci contrevient à une règle d'exclusion de la preuve, distincte de la règle applicable à l'opinion. Ainsi, dans l'arrêt *R. c. Morin*, [1988] 2 R.C.S. 345, la preuve obtenue par le ministère public en contre-interrogatoire du psychiatre cité par l'accusé a été jugée inadmissible parce qu'il n'avait pas été établi qu'elle était pertinente autrement que relativement à la propension à commettre le crime reproché. En dépit du fait que la preuve respectait par ailleurs les critères d'admissibilité de la preuve d'expert, elle a donc été exclue sur le fondement de la règle qui interdit au ministère public de produire une preuve de la propension de l'accusé à moins que ce dernier n'ait mis sa moralité en jeu. La portée de la restriction, lorsqu'une telle preuve est produite par l'accusé, est au cœur même de la présente affaire, et sera analysée ci-après.

(d) A Properly Qualified Expert

Finally the evidence must be given by a witness who is shown to have acquired special or peculiar knowledge through study or experience in respect of the matters on which he or she undertakes to testify.

d) La qualification suffisante de l'expert

Enfin, la preuve doit être présentée par un témoin dont on démontre qu'il ou elle a acquis des connaissances spéciales ou particulières grâce à des études ou à une expérience relatives aux questions visées dans son témoignage.

In summary, therefore, it appears from the foregoing that expert evidence which advances a novel scientific theory or technique is subjected to special scrutiny to determine whether it meets a basic threshold of reliability and whether it is essential in the sense that the trier of fact will be unable to come to a satisfactory conclusion without the assistance of the expert. The closer the evidence approaches an opinion on an ultimate issue, the stricter the application of this principle.

En résumé, il ressort donc de ce qui précède que la preuve d'expert qui avance une nouvelle théorie ou technique scientifique est soigneusement examinée pour déterminer si elle satisfait à la norme de fiabilité et si elle est essentielle en ce sens que le juge des faits sera incapable de tirer une conclusion satisfaisante sans l'aide de l'expert. Plus la preuve se rapproche de l'opinion sur une question fondamentale, plus l'application de ce principe est stricte.

(2) *Expert Evidence as to Disposition*

In order to decide what principles should govern the admissibility of this kind of evidence, it is necessary to consider the limitations imposed by the rules relating to character evidence, having regard to the restrictions imposed by the criteria in respect of expert evidence.

I have already referred to *R. v. Morin*, wherein an unanimous court decided that the Crown cannot lead such evidence in the first instance unless it is relevant to an issue and is not being used merely as evidence of disposition. As I stated, at p. 371:

> In my opinion, in order to be relevant on the issue of identity the evidence must tend to show that the accused shared a distinctive unusual behavioural trait with the perpetrator of the crime. The trait must be sufficiently distinctive that it operates virtually as a badge or mark identifying the perpetrator. The judgment of Lord Hailsham in *Boardman*, quoted above, provides one illustration of the kind of evidence that would be relevant.
>
> . . .
>
> Conversely, the fact that the accused is a member of an abnormal group some of the members of which have the unusual behavioural characteristics shown to have been possessed by the perpetrator is not sufficient. In some cases it may, however, be shown that all members of the group have the distinctive unusual characteristics. If a reasonable inference can be drawn that the accused has those traits then the evidence is relevant subject to the trial judge's obligation to exclude it if its prejudicial effect outweighs its probative value. The greater the number of persons in society having these tendencies, the less relevant the evidence on the issue of identity and the more likely that its prejudicial effect predominates over its probative value.

When, however, the evidence is tendered by the accused, other considerations apply. The accused is permitted to adduce evidence as to disposition both in his or her own evidence or by calling witnesses. The general rule is that evidence as to character is limited to evidence of the accused's reputation in the community with respect to the relevant trait or traits. The accused in his or her own testi-

(2) *Preuve d'expert quant à la prédisposition*

Pour déterminer les principes qui devraient gouverner l'admissibilité de ce genre de preuve, il faut considérer les restrictions imposées par les règles relatives à la preuve de moralité, eu égard aux restrictions imposées par les critères relatifs à la preuve d'expert.

J'ai cité plus haut l'arrêt *R. c. Morin* dans lequel notre Cour unanime a décidé que le ministère public ne peut produire une telle preuve en premier lieu que si elle est pertinente et n'est pas utilisée comme simple preuve de la prédisposition. Comme je l'ai mentionné, à la p. 371:

> À mon avis, pour être pertinente relativement à la question de l'identité, la preuve doit tendre à démontrer que l'accusé partageait avec l'auteur du crime un trait de comportement distinctif inhabile. Le trait doit être distinctif au point d'agir presque comme une étiquette ou une marque qui identifie l'auteur du crime. L'extrait précité des motifs de lord Hailsham dans l'arrêt *Boardman* donne un exemple du genre de preuve qui serait pertinente.
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> . . .
>
> Inversement, l'appartenance de l'accusé à un groupe anormal dont certains membres présentent des caractéristiques de comportement inhabituelles que possédait l'auteur du crime, n'est pas suffisante. Dans certains cas, cependant, il peut être démontré que tous les membres du groupe ont les caractéristiques distinctives inhabituelles. Si on peut raisonnablement en déduire que l'accusé possède ces traits, la preuve est alors pertinente sous réserve de l'obligation du juge du procès de l'exclure si son effet préjudiciable l'emporte sur sa valeur probante. Plus le nombre de personnes dans la société présente ces tendances, moins la preuve est pertinente relativement à la question de l'identité et plus il est vraisemblable que son effet préjudiciable soit supérieur à sa valeur probante.

Néanmoins, lorsque la preuve est celle de l'accusé, d'autres facteurs entrent en jeu. L'accusé peut produire une preuve sur la prédisposition tant par son propre témoignage que par celui d'autres témoins. Suivant la règle générale, la preuve de moralité se limite à la preuve de la réputation de l'accusé au sein de la collectivité relativement au trait de caractère concerné. L'accusé peut toutefois

mony, however, may rely on specific acts of good conduct. See *R. v. McNamara (No. 1)* (1981), 56 C.C.C. (2d) 193, at p. 348; leave to appeal refused, [1981] 1 S.C.R. xi. Evidence of an expert witness that the accused, by reason of his or her mental make-up or condition of the mind, would be incapable of committing or disposed to commit the crime does not fit either of these categories. A further exception, however, has developed that is limited in scope. I propose to examine the extent of this exception.

In England, with the exception of non-insane automatism, expert psychiatric and psychological evidence is not admissible to show the accused's state of mind unless it is contended that the accused is abnormal in the sense of suffering from insanity or diminished responsibility. In *R. v. Chard* (1971), 56 Cr. App. R. 268, the trial judge refused to allow medical evidence that the accused who was not alleged to be suffering from a disease of the mind lacked the necessary *mens rea*. In the Court of Appeal, Roskill L.J. stated at p. 271 that it was "not permissible to call a witness, whatever his personal experience, merely to tell the jury how he thinks an accused man's mind — assum[ing] a normal mind — operated at the time of the alleged crime . . . ."

In *Lowery v. The Queen*, [1974] A.C. 85 (P.C.), such evidence was admitted when tendered by one co-accused against another. It was a case involving the sadistic murder of a young girl. Lowery and King were both charged, and it was obvious that one, the other, or both of them were guilty. In this context, King sought to prove that he feared Lowery and that Lowery dominated him. The Privy Council held that the trial judge acted properly in allowing King to call a psychiatrist to swear that he was less likely to have committed the crime than Lowery. That is, character evidence tendered by a psychiatrist was held to be admissible. Lord

invoquer dans son propre témoignage des actes particuliers de bonne conduite. Voir *R. c. McNamara (No. 1)* (1981), 56 C.C.C. (2d) 193, à la p. 348; autorisation de pourvoi refusée, [1981] 1 R.C.S. xi. Le témoignage d'un expert indiquant qu'en raison de sa constitution mentale ou de son état mental, l'accusé serait incapable de commettre le crime ou ne pourrait être prédisposé à le commettre, ne correspond à aucune des catégories concernées. Une autre exception de portée limitée a toutefois été créée. Je propose d'en examiner l'étendue.

En Angleterre, à l'exception de l'automatisme non fondé sur l'aliénation mentale, la preuve d'expert psychiatrique et psychologique n'est pas admissible pour démontrer l'état d'esprit de l'accusé, sauf si on fait valoir qu'il est anormal parce qu'il souffre d'aliénation mentale ou de responsabilité amoindrie. Dans l'arrêt *R. c. Chard* (1971), 56 Cr. App. R. 268, le juge du procès a refusé d'accueillir la preuve médicale portant que l'accusé, dont on n'alléguait pas qu'il souffrait d'une maladie mentale, n'avait pas la *mens rea* requise. En Cour d'appel, le lord juge Roskill a déclaré, à la p. 271, qu'il était [TRADUCTION] «interdit de citer un témoin, quelle que soit son expérience personnelle, simplement pour dire au jury comment il pense que l'esprit de l'accusé — en suppos[ant] qu'il ait un esprit normal — fonctionnait à l'époque du crime reproché . . .»

Dans l'arrêt *Lowery c. The Queen*, [1974] A.C. 85 (C.P.), un témoignage semblable, rendu par un coaccusé contre l'autre, a été admis. L'affaire portait sur le meurtre sadique d'une jeune fille. Lowery et King étaient tous deux accusés, et il était évident que l'un ou l'autre, ou les deux, étaient coupables. C'est dans ce contexte que King a cherché à établir qu'il craignait Lowery et que ce dernier exerçait sur lui sa domination. Le Conseil privé a conclu que le juge du procès avait agi correctement en permettant à King d'appeler un psychiatre pour témoigner sous serment qu'il était moins susceptible d'avoir commis le crime que Lowery. La preuve de moralité produite par un psychiatre a ainsi été jugée admissible. Lord

Morris of Borth-y-Gest of the Privy Council stated, at p. 103:

Lowery and King were each asserting that the other was the completely dominating person at the time Rosalyn Nolte was killed: each claimed to have been in fear of the other. In these circumstances it was most relevant for King to be able to show, if he could, that Lowery had a personality marked by aggressiveness whereas he, King, had a personality which suggested that he would be led and dominated by someone who was dominant and aggressive . . . . Not only however was the evidence which King called relevant to this case: its admissibility was placed beyond doubt by the whole substance of Lowery's case.

Moreover, in *R. v. Turner*, *supra*, the accused unsuccessfully pleaded provocation in answer to a charge of murder of his girlfriend whom he alleged that he had killed in a fit of rage caused by her sudden confession of infidelity. He appealed on the grounds that the trial judge had wrongly refused to admit the evidence of a psychiatrist. That psychiatrist was to testify to the effect that the accused was not mentally ill, that he had a great affection toward the victim and that he deeply regretted his act of murder. The evidence was rejected on the basis that it was not the proper subject of expert evidence. As for *Lowery v. The Queen*, it was confined to its own facts.

C. Tapper in *Cross on Evidence* (7th ed. 1990), at p. 492, reconciled *Lowery v. The Queen* and *R. v. Turner* using a principled approach:

Juries do not need to be told that normal men are liable to lose control of themselves when their women admit to infidelity, but they require all the expert assistance they can get to help them determine which of two accused has the more aggressive personality.

Tapper then proceeded to reconcile the two cases using a more technical approach:

Another way of reconciling the cases would be to treat the fact that Lowery had put his character in issue as crucial to the decision of the Privy Council, the psychiatric evidence then being admissible to impugn the credibility of his testimony. Unfortunately we are left with-

Morris of Borth-y-Gest du Conseil privé a dit, à la p. 103:

[TRADUCTION] Lowery et King ont tous deux fait valoir que l'autre était le dominateur absolu à l'époque du meurtre de Rosalyn Nolte: tous deux ont soutenu avoir craint l'autre. Dans ces circonstances, il était tout à fait opportun pour King de pouvoir démontrer, s'il en était capable, que Lowery avait une personnalité marquée par l'agressivité alors que lui-même, King, avait une personnalité indiquant qu'il serait mené et dominé par une personne dominante et agressive [. . .] Toutefois, non seulement la preuve que King a produite était-elle pertinente quant à la présente affaire, mais son admissibilité a été placée au-dessus de tout doute par la substance de la preuve de Lowery.

En outre, dans l'arrêt *R. c. Turner*, précité, l'accusé a plaidé sans succès la provocation en défense à l'accusation du meurtre de son amie qu'il alléguait avoir tuée dans un excès de rage provoqué par sa confession inattendue d'infidélité. Il a interjeté appel pour le motif que le juge du procès avait refusé à tort d'admettre le témoignage d'un psychiatre. Ce dernier devait témoigner que l'accusé n'était pas mentalement malade, qu'il ressentait une grande affection à l'endroit de la victime et qu'il regrettait sincèrement d'avoir commis le meurtre. Le témoignage a été rejeté sur le fondement qu'il ne relevait pas de la preuve d'expert. Quant à l'affaire *Lowery c. The Queen*, elle a été confinée à ses propres faits.

C. Tapper dans *Cross on Evidence* (7e éd. 1990), à la p. 492, a concilié les arrêts *Lowery c. The Queen* et *R. c. Turner*, en s'aidant d'une conception fondée sur les principes:

[TRADUCTION] Il n'est pas nécessaire de dire aux jurés que des hommes normaux peuvent perdre leur maîtrise de soi lorsque leurs femmes avouent leur infidélité, mais il convient de leur fournir toute l'aide experte possible afin de déterminer lequel des deux accusés est le plus agressif.

Tapper a ensuite concilié les deux affaires en recourant à une conception plus technique:

[TRADUCTION] On peut concilier les deux affaires également en faisant du fait que Lowery a mis sa moralité en jeu un élément déterminant de la décision du Conseil privé, la preuve psychiatrique étant alors admissible pour attaquer la crédibilité de son témoignage. Malheu-

out any guidance on the subject from the Court of Appeal who contented themselves with saying that *Lowery*'s case was decided on its special facts.

With respect to the development of the exception in Canada, *R. v. Lupien, supra,* is a good starting point. It involved a respondent who was convicted of attempting to commit an act of gross indecency, and whose defence was that he lacked the requisite intent to commit the act because he thought his companion was a woman. He sought to prove his "lack of intent" by tendering psychiatric evidence which showed that he reacted violently against any type of homosexual activity and, therefore, could not have knowingly engaged in an act of gross indecency. Ritchie J. concluded, at pp. 277-78, that the evidence was admissible for the following reasons:

> I am far from saying that as a general rule psychiatric evidence of a man's disinclination to commit the kind of crime with which he is charged should be admitted, but the present case is concerned with gross indecency between two men and I think that crimes involving homosexuality stand in a class by themselves in the sense that the participants frequently have characteristics which make them more readily identifiable as a class than ordinary criminals. See *Reg. v. Thompson* [(1917), 13 Cr. App. R. 61 at 81]. In any event, it appears to me that the question of whether or not a man is homosexually inclined or otherwise sexually perverted is one upon which an experienced psychiatrist is qualified to express an opinion and that if such opinion is relevant it should be admitted at a trial such as this even if it involves the psychiatrist in expressing his conclusion that the accused does not have the capacity to commit the crime with which he is charged.

It is this passage that created the abnormal group exception which is often sought to be applied to various contexts other than the homosexual context.

The Ontario Court of Appeal, and specifically Martin J.A., further looked into this exception of proving the disposition of the accused through psychiatric evidence in the following two cases: *R. v. McMillan, supra,* aff'd [1977] 2 S.C.R. 824, and *R. v. Robertson, supra.*

reusement, nous sommes laissés sans autre assistance à cet égard que la simple déclaration de la Cour d'appel portant que l'affaire *Lowery* a été décidée en fonction de ses faits propres.

L'arrêt *R. c. Lupien,* précité, est un bon point de départ de l'évolution de l'exception au Canada. Déclaré coupable d'avoir tenté de commettre un acte de grossière indécence, l'intimé plaidait qu'il n'avait pas l'intention requise pour commettre l'acte, parce qu'il croyait que son compagnon était une femme. Il a tenté d'établir son «absence d'intention» en produisant une preuve psychiatrique démontrant qu'il réagissait violemment à tout genre d'activité homosexuelle et que, par conséquent, il ne pouvait avoir sciemment commis un acte de grossière indécence. Le juge Ritchie a conclu à l'admissibilité de la preuve pour les motifs suivants (aux pp. 277 et 278):

> Je suis loin de poser comme règle générale que la preuve psychiatrique des prédispositions d'une personne à ne pas commettre le genre de crime dont il est accusé doit être admise, mais dans cette affaire-ci il s'agit de grossière indécence entre deux hommes et je pense que les crimes relatifs à l'homosexualité sont dans une catégorie à part, en ce sens que leurs auteurs possèdent souvent des caractéristiques qui les rendent collectivement plus facilement identifiables que les criminels ordinaires. Voir *Regina v. Thompson* [(1917), 13 Cr. App. R. 61 à 81]. De toute façon, il me paraît qu'un psychiatre est qualifié pour exprimer un avis sur la question de savoir si un homme est prédisposé à l'homosexualité, ou autrement sexuellement perverti. Si un tel avis est pertinent, il doit être recevable dans un procès comme celui-ci, même s'il amène le psychiatre à exprimer l'avis que l'inculpé ne possède pas la capacité de commettre le crime dont il est accusé.

C'est ce passage qui a créé l'exception relative au groupe anormal que l'on tente fréquemment d'appliquer dans des contextes autres que celui de l'homosexualité.

La Cour d'appel de l'Ontario, et en particulier le juge Martin, a examiné plus amplement l'exception qui consiste à démontrer la prédisposition de l'accusé à l'aide de la preuve psychiatrique, dans les deux affaires suivantes: *R. c. McMillan,* précité, conf. par [1977] 2 R.C.S. 824, et *R. c. Robertson,* précité.

R. v. McMillan involved an accused who was charged with the murder of his infant child and whose defence was that it was in fact his wife and not he who killed the child. The trial judge allowed the accused to call a psychiatrist who testified that the accused's wife had a psychopathic personality disturbance with brain damage. This psychiatric evidence showed that a third party, the accused's wife, was more likely to have committed the crime because of her abnormal personality/disposition. Martin J.A., speaking for the Court, found that disposition to commit a crime is generally relevant since it goes to the probability/propensity of the person doing or not doing the act charged. He then referred to *R. v. Lupien*, at p. 169, as creating the following exception:

> One of the exceptions to the general rule that the character of the accused, in the sense of disposition, when admissible, can only be evidenced by general reputation, relates to the admissibility of psychiatric evidence where the particular disposition or tendency in issue is characteristic of an abnormal group, the characteristics of which fall within the expertise of the psychiatrist.

After having noted the applicability of *R. v. Lupien*, Martin J.A. engaged in a lengthy discussion of the exception and in fact extended *R. v. Lupien*. This extension, at pp. 173-75 of *R. v. McMillan*, was affirmed by the Supreme Court of Canada:

> I do not consider that, because the crime under consideration was not one that could only be committed by a person with a special or abnormal propensity, psychiatric evidence with respect to Mrs. McMillan's disposition, was, therefore, inadmissible, in the circumstances of this case.

> All evidence to be admissible must, of course, be relevant to some issue in the case. Psychiatric evidence with respect to the personality traits or disposition of a person, whether of the accused or another, may be admissible for different purposes. While those purposes are not mutually exclusive, evidence which is relevant for one purpose may not be for another.

Dans l'affaire *R. c. McMillan*, l'accusé était inculpé du meurtre de son jeune enfant. Il plaidait que c'était en fait sa femme, et non lui, qui avait tué l'enfant. Le juge du procès a permis à l'accusé d'appeler un psychiatre qui a témoigné que l'épouse de l'accusé souffrait d'un trouble psychopathique de la personnalité et de lésions cérébrales. Cette preuve psychiatrique a démontré qu'un tiers, l'épouse de l'accusé, était plus susceptible d'avoir commis le crime en raison de sa personnalité et de sa prédisposition toutes deux anormales. Exprimant l'opinion de la Cour, le juge Martin a conclu que la prédisposition à commettre un crime est généralement pertinente puisqu'en ce qui concerne la perpétration de l'acte reproché, elle vise la propension et la probabilité. Il a ensuite indiqué que l'arrêt *R. c. Lupien*, à la p. 169, créait l'exception suivante:

> [TRADUCTION] L'une des exceptions à la règle générale suivant laquelle, lorsqu'elle est admissible, la moralité de l'accusé (dans le sens de la prédisposition) ne peut être démontrée que par la preuve de la réputation générale, porte sur l'admissibilité de la preuve psychiatrique lorsque la prédisposition ou la propension en question est propre à un groupe anormal, dont les caractéristiques relèvent de l'expertise du psychiatre.

Après avoir noté l'applicabilité de cet arrêt, le juge Martin a longuement analysé l'exception et il a en fait élargi la portée de l'arrêt *R. c. Lupien*. Cette expansion, aux pp. 173 à 175 de l'arrêt *R. c. McMillan*, a été confirmée par la Cour suprême du Canada:

> [TRADUCTION] Je ne considère pas que, du fait qu'il ne s'agit pas d'un crime qui n'aurait pu être commis que par une personne dotée d'une propension particulière ou anormale, la preuve psychiatrique relative à la prédisposition de M^me^ McMillan était par conséquent inadmissible dans les circonstances de l'espèce.

> Pour être admissible, toute preuve doit évidemment être pertinente relativement à certaines questions soulevées dans l'affaire. La preuve psychiatrique relative aux traits de caractère ou à la prédisposition d'une personne, qu'il s'agisse ou non de l'accusé, peut être admissible à différentes fins. Si ces fins ne sont pas mutuellement exclusives, la preuve pertinente quant à une fin peut ne pas l'être quant à une autre.

Psychiatric evidence with respect to the personality traits or disposition of an accused, or another, is admissible provided:

(a) the evidence is relevant to some issue in the case;

(b) the evidence is not excluded by a policy rule;

(c) the evidence falls within the proper sphere of expert evidence.

One of the purposes for which psychiatric evidence may be admitted is to prove identity when that is an issue in the case, since psychical as well as physical characteristics may be relevant to identify the perpetrator of the crime.

Where the offence is of a kind that is committed only by members of an abnormal group, for example, offences involving homosexuality, psychiatric evidence that the accused did or did not possess the distinguishing characteristics of that abnormal group is relevant either to bring him within, or to exclude him from, the special class of which the perpetrator of the crime is a member. In order for psychiatric evidence to be relevant for that purpose, the offence must be one which indicates that it was committed by a person with an abnormal propensity or disposition which stamps him as a member of a special and extraordinary class.

Psychiatric evidence with respect to the personality traits or disposition of the accused, or another, if it meets the three conditions of admissibility above set out, is also admissible, however, as bearing on the *probability* of the accused, or another, having committed the offence.

It would appear that it was upon this latter ground that the psychologist's evidence was held to be admissible in *Lowery v. The Queen, supra*, although the features of the offence in that case were sufficiently indicative of the possession of an abnormal propensity by the perpetrator, that the expert evidence might have been relevant to the issue of identity as well. Since in that case the evidence was offered by the accused King, it was not excluded by the policy rule which prevents the prosecution from introducing evidence to prove that the accused by reason of his criminal propensities is likely to have committed the crime charged. Both accused in *Lowery v. The Queen* had psychopathic personalities (although the features of King's psychopathic personality were

La preuve psychiatrique relative aux traits de caractère ou à la prédisposition d'une personne, qu'il s'agisse ou non de l'accusé, est admissible à trois conditions:

a) la preuve est pertinente quant à une question soulevée dans l'affaire;

b) la preuve n'est exclue par aucune règle de principe;

c) la preuve entre dans le domaine de la preuve d'expert.

La preuve psychiatrique peut être admise entre autres pour établir l'identité lorsque cet élément est soulevé dans l'affaire, puisque des caractéristiques tant psychiques que physiques peuvent être pertinentes relativement à l'identification de l'auteur du crime.

Lorsque l'infraction est de celles qui sont commises uniquement par les membres d'un groupe anormal, par exemple les infractions relatives à l'homosexualité, la preuve psychiatrique que l'accusé possédait ou non les caractéristiques distinctives de ce groupe anormal est pertinente relativement à son inclusion dans la catégorie particulière dont l'auteur du crime fait partie, ou à son exclusion. Pour que la preuve psychiatrique soit pertinente quant à cette fin, l'infraction doit indiquer qu'elle a été commise par un individu doté d'une propension ou d'une prédisposition anormale qui le désigne comme faisant partie d'une catégorie spéciale et extraordinaire.

Si elle satisfait aux trois conditions d'admissibilité énoncées ci-dessus, la preuve psychiatrique relative aux traits de caractère ou à la prédisposition d'une personne, qu'il s'agisse ou non de l'accusé, est toutefois également admissible comme portant sur la *probabilité* que l'accusé ou une autre personne ait commis l'infraction en cause.

Il semble que ce soit pour ce dernier motif que le témoignage du psychologue a été jugé admissible dans l'arrêt *Lowery c. The Queen*, précité, bien que les caractéristiques de l'infraction dans cette affaire aient suffisamment indiqué une propension anormale de l'auteur du crime pour que la preuve d'expert ait pu être pertinente relativement à la question de l'identité également. Puisque dans cette affaire la preuve a été produite par l'accusé King, elle n'a pas été exclue par la règle de principe qui interdit à la poursuite d'introduire une preuve pour établir qu'en raison de sa propension criminelle, l'accusé est susceptible d'avoir commis le crime reproché. Les deux accusés dans l'affaire *Lowery c. The Queen* ayant des personnalités de psychopathes (bien que les caractéristiques de la personnalité psychopathique de King soient moins marquées que celles de

less severe than Lowery's) and hence their personality traits fell within the proper sphere of expert evidence.

. . .

Where the crime under consideration does not have features which indicate that the perpetrator was a member of an abnormal group, psychiatric evidence that the accused has a normal mental make-up but does not have a disposition for violence or dishonesty or other relevant character traits frequently found in ordinary people is inadmissible. The psychiatric evidence in the circumstances postulated is not relevant on the issue of identity to exclude the accused as the perpetrator any more than the possession of violent or dishonest tendencies by the accused or a third person would be admissible to identify the accused or the third person as the perpetrator of the crime.

"So common a characteristic is not a recognisable mark of the individual." (*Per* Lord Sumner in *Thompson v. Director of Public Prosecutions* (1918), 26 Cox C.C. 189 at p. 199.)

While such evidence is relevant as bearing on the probability of the accused having committed the crime, the psychiatric evidence proffered in such circumstances really amounts to an attempt to introduce evidence of the accused's good character, as a normal person, through a psychiatrist. Such evidence does not fall within the proper sphere of expert evidence and is subject to the ordinary rule applicable to character evidence which, in general, requires the character of the accused to be evidenced by proof of general reputation.

I leave open, until the question is required to be decided, whether when the crime is one assumed to be committed by normal persons, *e.g.*, rape, psychiatric evidence is admissible to show that the accused is a member of an abnormal group, possessing characteristics which make it improbable that he committed the offence, *e.g.*, that he is a homosexual with an aversion to heterosexual relations. I am disposed, however, to think that such evidence is admissible. [Emphasis in original.]

The evidence of the psychiatrist was held to be admissible.

Martin J.A. elaborated on the reasoning set out above in *R. v. Robertson*, *supra*. That case involved a 16-year-old accused charged with bru-

Lowery), leurs traits de caractère entraient dans le domaine de la preuve d'expert.

. . .

Lorsque le crime en cause ne présente aucune caractéristique indiquant que l'auteur faisait partie d'un groupe anormal, la preuve psychiatrique que l'accusé a une constitution mentale normale, mais qu'il n'a pas de prédisposition à la violence ou à la malhonnêteté ou d'autres traits de caractère pertinents que possèdent fréquemment les personnes ordinaires, est inadmissible. Dans les circonstances énoncées, la preuve psychiatrique n'est pas plus pertinente relativement à la question de l'identité en vue de déterminer que l'accusé n'est pas l'auteur du crime que ne serait admissible la preuve que l'accusé ou un tiers a une tendance violente ou malhonnête en vue de déterminer que l'accusé ou le tiers est l'auteur du crime.

«Une caractéristique si courante ne constitue pas une marque reconnaissable de l'individu.» (Les motifs de lord Sumner dans l'arrêt *Thompson c. Director of Public Prosecutions* (1918), 26 Cox C.C. 189, à la p. 199.)

Si une telle preuve est pertinente parce qu'elle porte sur la probabilité que l'accusé ait commis le crime, la preuve psychiatrique produite dans de telles circonstances équivaut réellement à une tentative d'introduire une preuve de la bonne moralité de l'accusé, comme une personne normale, par l'entremise d'un psychiatre. Une telle preuve n'entre pas dans le domaine de la preuve d'expert. Elle est assujettie à la règle ordinaire en matière de preuve de moralité qui, en général, requiert que la moralité de l'accusé soit démontrée au moyen de la preuve de sa réputation générale.

Je laisse ouverte, jusqu'à ce qu'elle doive être tranchée, la question de savoir, lorsqu'un crime, comme le viol, est présumé être commis par des personnes normales, si la preuve psychiatrique est admissible pour établir que l'accusé fait partie d'un groupe anormal possédant des caractéristiques en raison desquelles il est peu probable qu'il ait commis l'infraction, comme le fait qu'il soit un homosexuel ayant une aversion pour les relations hétérosexuelles. Je suis toutefois disposé à penser qu'une telle preuve est admissible. [En italique dans l'original.]

Le témoignage du psychiatre a été jugé admissible.

Le juge Martin a commenté le raisonnement énoncé ci-dessus dans l'arrêt *R. c. Robertson*, précité, où l'accusé de 16 ans était inculpé d'avoir tué

tally murdering a nine-year-old girl by kicking her. The defence sought to introduce expert psychiatric evidence to show that a propensity for violence or aggression was not a part of the accused's psychological make-up. This tended to rebut evidence led by the Crown as to the accused's violent character. Martin J.A. summed up, at p. 426:

While the judgment of Ritchie, J., deals only with the admissibility of psychiatric evidence with respect to disposition in offences involving homosexuality, there would appear to be no logical reason why such evidence should not be admitted on the same principle in other cases where there is evidence tending to show that, by reason of the nature of the offence, or its distinctive features, its perpetrator was a person who, in the language of Lord Sumner, was a member of "a specialized and extraordinary class", and whose psychological characteristics fall within the expertise of the psychiatrist, for the purpose of showing that the accused did not possess the psychological characteristics of persons of that class. Obviously, where such evidence is adduced by the accused, the prosecution is entitled to call psychiatric evidence in order to rebut the evidence introduced by the defence.

In my view, however, the judgment of Ritchie, J., in *R. v. Lupien, supra*, provides no support for a conclusion that, in the case of ordinary crimes of violence, psychiatric evidence is admissible to prove that the accused's psychological make-up does not include a tendency or disposition for violence.

Martin J.A. further stated, at pp. 429-30:

In my view, psychiatric evidence with respect to disposition or its absence is admissible on behalf of the defence, if relevant to an issue in the case, where the disposition in question constitutes a characteristic feature of an abnormal group falling within the range of study of the psychiatrist, and from whom the jury can, therefore, receive appreciable assistance with respect to a matter outside the knowledge of persons who have not made a special study of the subject. A *mere* disposition for violence, however, is not so uncommon as to constitute a feature characteristic of an abnormal group falling within the special field of study of the psychiatrist and permitting psychiatric evidence to be given of the absence of such disposition in the accused. [Emphasis in original.]

brutalement à coups de pied une fille de neuf ans. La défense avait tenté d'introduire une preuve psychiatrique d'expert pour démontrer que la constitution psychologique de l'accusé n'indiquait aucune propension à la violence ou à l'agression. Cette preuve visait à réfuter la preuve introduite par le ministère public au sujet de la nature violente de l'accusé. Le juge Martin a résumé à la p. 426:

[TRADUCTION] Si les motifs du juge Ritchie ne portent que sur l'admissibilité de la preuve psychiatrique relative à la prédisposition à commettre des infractions relatives à l'homosexualité, il ne paraît exister aucune raison logique de ne pas admettre une telle preuve en se fondant sur le même principe dans d'autres affaires où la preuve tend à démontrer qu'en raison de la nature de l'infraction ou de ses caractéristiques distinctives, son auteur faisait partie, dans les termes de lord Sumner, d'une «catégorie spéciale et extraordinaire», dont les caractéristiques psychologiques relèvent du domaine d'expertise du psychiatre, dans le but de démontrer que l'accusé ne possédait pas les caractéristiques psychologiques propres aux personnes de cette catégorie. De toute évidence, lorsqu'une telle preuve est produite par l'accusé, la poursuite peut produire une preuve psychiatrique pour la réfuter.

À mon avis, toutefois, l'opinion du juge Ritchie dans *R. c. Lupien*, précité, n'offre aucun appui à la conclusion que, dans le cas de crimes ordinaires de violence, la preuve psychiatrique est admissible pour démontrer que la constitution psychologique de l'accusé n'inclut aucune tendance ou prédisposition à la violence.

Le juge Martin a ajouté aux pp. 429 et 430:

[TRADUCTION] À mon avis, la preuve psychiatrique relative à la prédisposition ou à son absence est admissible pour le compte de la défense si elle est pertinente relativement à une question soulevée dans l'affaire, lorsque la prédisposition en question constitue un élément caractéristique d'un groupe anormal qui entre dans le domaine d'étude du psychiatre, et duquel le jury peut donc recevoir une aide appréciable à l'égard d'une question qui se situe à l'extérieur de la connaissance des personnes qui n'ont pas étudié le sujet. Une *simple* prédisposition à la violence n'est toutefois pas inhabituelle au point de constituer un élément caractéristique d'un groupe anormal qui entre dans le domaine particulier d'étude du psychiatre et qui permet que la preuve psychiatrique de l'absence d'une telle prédisposition chez l'accusé soit produite. [En italique dans l'original.]

Given this reasoning, Martin J.A. concluded that the crime was not specially marked and so the conditions for the admissibility of psychiatric evidence were not met.

A useful summary of the principles that emerge from the cases is made by Alan W. Mewett, "Character as a Fact in Issue in Criminal Cases" (1984-85), 27 *Crim. L.Q.* 29, at pp. 35-36, of his article where he points out the various contexts in which an accused can tender character evidence by way of an expert:

> There are thus three basic requirements that must be met before such psychiatric evidence can even be considered as potentially admissible. First, it must be relevant to an issue. Second, it must be of appreciable assistance to the trier of fact and third, it must be evidence that would otherwise be unavailable to the ordinary layman without specialized training, but these requirements only set forth the general requirements for the admissibility of expert testimony.
>
> Once these hurdles have been passed, a number of different scenarios may be postulated. The crime may be an "ordinary" one (which I take to mean a crime for which no special mental characteristics on the part of the perpetrator would be required) and the accused is an "ordinary" person; the crime may be an "ordinary" one, but the accused an "extraordinary" person (*i.e.*, having some peculiar mental make-up that would tend to show that he would not commit that "ordinary" crime); the crime may be "extraordinary", but the accused "ordinary"; or the crime may be "extraordinary" and the accused "extraordinary", in a different direction.
>
> In the first scenario, the evidence is irrelevant because it is simply not probative of anything. In the second it is probative and admissible but only if the extraordinary characteristic of the accused tends to show that he would not commit an ordinary crime of that nature (such as a homosexual being charged with a heterosexual offence). In the third, if it is shown that the crime is such that it could only, or in all probability would only, be committed by a person having identifiable peculiarities that the accused does not possess, it would be admissible. In the last scenario, the situation is the same provided that the difference in the abnormalities tends to exclude the accused from the probable group of perpetrators.

Suivant ce raisonnement, le juge Martin a conclu que le crime n'était pas spécialement marqué, et que les conditions d'admissibilité de la preuve psychiatrique n'étaient donc pas remplies.

Alan W. Mewett, dans un article intitulé «Character as a Fact in Issue in Criminal Cases» (1984-85), 27 *Crim. L.Q.* 29, aux pp. 35 et 36, résume utilement les principes qui ressortent de la jurisprudence. Il souligne les différents contextes dans lesquels un accusé peut produire une preuve de moralité par l'entremise d'un expert:

> [TRADUCTION] Il faut donc satisfaire à trois exigences fondamentales pour que la preuve psychiatrique puisse même être considérée comme peut-être admissible. Premièrement, elle doit être pertinente relativement à une question en litige. Deuxièmement, elle doit apporter une aide appréciable au juge des faits et troisièmement, elle ne pourrait être obtenue autrement par le profane ordinaire qui ne possède aucune formation spécialisée. Ces conditions ne font toutefois qu'énoncer les exigences générales d'admissibilité du témoignage d'expert.
>
> Une fois surmontés ces obstacles, différents scénarios peuvent être posés. Le crime peut être «ordinaire» (ce qui à mon avis signifie un crime pour lequel aucune caractéristique mentale particulière ne serait requise chez l'auteur du crime) et l'accusé, une personne «ordinaire»; le crime peut être «ordinaire», et l'accusé, une personne «extraordinaire» (c'est-à-dire que sa constitution mentale particulière tendrait à démontrer qu'il ne commettrait pas ce crime «ordinaire»); le crime peut être extraordinaire, mais l'accusé «ordinaire»; ou le crime et l'accusé peuvent tous deux être «extraordinaires», dans un sens différent.
>
> Dans le premier scénario, la preuve n'est pas pertinente parce qu'elle ne prouve simplement rien. Dans le second, elle n'est probante et admissible que si la caractéristique extraordinaire de l'accusé tend à établir qu'il ne commettrait pas un crime ordinaire de cette nature (comme l'homosexuel accusé relativement à une infraction de nature hétérosexuelle). Dans le troisième, s'il est démontré que le crime est tel qu'il ne pourrait être ou, selon toutes les probabilités, ne serait commis que par une personne ayant des caractéristiques identifiables que l'accusé ne possède pas, elle serait admissible. Dans le dernier scénario, la situation est identique, pour autant que la différence entre les éléments anormaux tende à exclure l'accusé du groupe probable d'auteurs.

I question whether use of the terms "abnormal" and "normal" is the best way to describe the concept that underlies their use. The term "abnormal" is derived from the English cases in which it usually connotes the mental state of insanity or diminished responsibility. See *R. v. Chard*, *supra*, at p. 270. The basic rationale of these cases is that "normal" human behaviour is a matter which a judge or jury can assess without the assistance of expert evidence. Canadian cases have extended the exception to include what has been described as sexually deviant behaviour. See Rosemary Pattenden, "Conflicting Approaches to Psychiatric Evidence in Criminal Trials: England, Canada and Australia", [1986] *Crim. L.R.* 92, at p. 100. The rationale underlying this extension is the relevance of the evidence based on the distinctiveness of the behavioural traits of either the putative perpetrator of the crime or the accused. This distinctiveness tends to exclude the accused from the category of persons that could or would likely commit the crime.

There are other reasons why the use of the term "abnormal" is no longer satisfactory. Even in medical circles there are differing views as to what constitutes abnormality. See Pattenden, *supra*, at p. 100, and David C. Rimm and John W. Sommervill, *Abnormal Psychology* (1977), at pp. 31 and 32. Moreover, it imports a value judgment on the lifestyle of some groups in society. This is aptly illustrated by considering the statement of Lord Sumner in *Thompson v. The King*, [1918] A.C. 221, at p. 235:

> The evidence tends to attach to the accused a peculiarity which, though not purely physical, I think may be recognized as properly bearing that name. Experience tends to show that these offences against nature connote an inversion of normal characteristics which, while demanding punishment as offending against social morality, also partake of the nature of an abnormal physical property. A thief, a cheat, a coiner, or a housebreaker is only a particular specimen of the genus rogue, and, though no doubt each tends to keep to his own line of business, they all alike possess the by no means extraordinary mental characteristic that they propose somehow to get their livings dishonestly. So common a

Je me demande si les termes «anormal» et «normal» sont la meilleure façon de décrire le concept qui sous-tend leur utilisation. Le terme «anormal» découle des affaires survenues en Angleterre, et dans lesquelles il dénote ordinairement l'état mental d'aliénation mentale ou de responsabilité amoindrie. Voir l'arrêt *R. c. Chard*, précité, à la p. 270. Selon le raisonnement qui sous-tend ces affaires, le comportement humain «normal» est une question que le juge ou le jury peut apprécier sans l'aide de la preuve d'expert. Au Canada, on a étendu l'exception pour y inclure ce qui a été qualifié de comportement sexuel déviant. Voir Rosemary Pattenden, «Conflicting Approaches to Psychiatric Evidence in Criminal Trials: England, Canada and Australia», [1986] *Crim. L.R.* 92, à la p. 100. Cet élargissement est motivé par la pertinence de la preuve fondée sur le caractère distinctif des traits de comportement soit de l'auteur putatif du crime, soit de l'accusé. Ce caractère distinctif tend à exclure l'accusé de la catégorie de personnes qui pourraient commettre le crime ou qui seraient susceptibles de le commettre.

Il existe d'autres raisons pour lesquelles l'utilisation du terme «anormal» n'est plus satisfaisante. Même dans les milieux médicaux, il existe des opinions contradictoires quant à ce qui constitue l'anormalité. Voir Pattenden, *op. cit.*, à la p. 100, et David C. Rimm et John W. Sommervill, *Abnormal Psychology* (1977), aux pp. 31 et 32. En outre, le terme en question implique un jugement de valeur sur le style de vie de certains groupes de la société. Cela est bien illustré dans la déclaration de lord Sumner dans l'arrêt *Thompson c. The King*, [1918] A.C. 221, à la p. 235:

> [TRADUCTION] La preuve tend à attacher à l'accusé une caractéristique qui, bien que n'étant pas purement physique, peut, à mon avis, être reconnue comme portant à juste titre ce nom. L'expérience tend à démontrer que ces infractions contraires à la nature dénotent une inversion de caractéristiques normales qui, bien qu'elles commandent une punition parce qu'elles offensent la moralité sociale, tiennent également d'une propriété physique anormale. Le voleur, le tricheur, le faux monnayeur ou le cambrioleur n'est qu'un modèle particulier du genre escroc, et bien qu'il ne fasse pas de doute que chacun tend à s'en tenir à son propre domaine, ils possèdent tous la caractéristique mentale aucunement extraor-

characteristic is not a recognizable mark of the individual. Persons, however, who commit the offences now under consideration seek the habitual gratification of a particular perverted lust, which not only takes them out of the class of ordinary men gone wrong, but stamps them with the hall-mark of a specialized and extraordinary class as much as if they carried on their bodies some physical peculiarity.

The difficulty in defining what is abnormal was recently referred to by McCarthy J.A. in *R. v. Garfinkle* (1992), 15 C.R. (4th) 254. At pages 256-57, speaking for the court, he stated:

What dispositions are to be classified as abnormal, as outside ordinary human experience, for the purpose of admitting psychiatric evidence may be a difficult question. A disposition for sadism is clearly abnormal. Dispositions for violence (short of sadism or something akin thereto), or for dishonesty, are clearly too common to be classified as abnormal. In sexual offences, classification is less easy. However, it seems to me that, whether it be called pedophilia or something else, a disposition in an adult to use boys of 10 and 11 for sexual gratification must be classified as abnormal. Accordingly, in the present case, psychiatric evidence is admissible to show that Garfinkle does not have such a disposition.

In my opinion, the term "distinctive" more aptly defines the behavioural characteristics which are a pre-condition to the admission of this kind of evidence.

How should the criteria for the admission of this type of evidence be applied? I find the following statement of Professor Mewett, *supra*, at p. 36, to be an apt characterization of the nature of the decision which the trial judge must make:

The categorization of crimes into the "ordinary" and the "extraordinary" is therefore a legal question to be determined by the judge, as is the "normality" or "abnormality" of the accused — to the despair, no doubt, of psychiatrists. But admissibility of evidence is a legal question and depends primarily upon relevance, that is, upon its

dinaire qu'ils se proposent d'une façon ou d'une autre de gagner leur vie malhonnêtement. Une caractéristique si courante ne constitue pas une marque reconnaissable de l'individu. Toutefois, les auteurs des infractions qui sont en cause en l'espèce recherchent la gratification habituelle d'une certaine luxure pervertie, qui non seulement les exclut de la catégorie des hommes ordinaires qui se sont écartés du droit chemin, mais indique également qu'ils appartiennent à une catégorie spéciale et extraordinaire, tout autant que si leur corps était marqué par un trait physique particulier.

La difficulté à déterminer ce qui est anormal a récemment été mentionnée par le juge McCarthy de la Cour d'appel dans l'arrêt *R. c. Garfinkle* (1992), 15 C.R. (4th) 254. Aux pages 256 et 257, s'exprimant au nom de la cour, il a déclaré:

[TRADUCTION] La question de savoir quelles prédispositions doivent être qualifiées d'anormales, d'étrangères à la nature humaine ordinaire, dans le but d'admettre la preuve psychiatrique, peut être difficile à trancher. Une prédisposition au sadisme est manifestement anormale. Les prédispositions à la violence (sauf le sadisme ou quelque chose de semblable) ou à la malhonnêteté sont manifestement trop communes pour être qualifiées d'anormales. Les infractions sexuelles sont plus difficiles à classer. Toutefois, qu'on l'appelle pédophilie ou autre, il me semble que la prédisposition chez un adulte à utiliser des garçons de 10 et 11 ans pour obtenir une gratification sexuelle doit être qualifiée d'anormale. En conséquence, en l'espèce, la preuve psychiatrique est admissible pour démontrer que Garfinkle n'a pas une telle prédisposition.

À mon avis, le terme «distinctif» définit mieux les caractéristiques de comportement qui sont une condition préalable à l'admission de cette forme de preuve.

Comment les critères d'admission de cette preuve devraient-ils être appliqués? À mon avis, les propos suivants du professeur Mewett, précité, à la p. 36, qualifient bien la nature de la décision que le juge du procès doit prendre:

[TRADUCTION] La classification des crimes comme «ordinaires», ou «extraordinaires», est donc une question de droit, comme l'est la «normalité» ou l'«anormalité» de l'accusé — au désespoir, sans doute, des psychiatres. Mais, l'admissibilité de la preuve est une question de droit et dépend principalement de sa perti-

assistance to the trier of fact in his inference-drawing process, and this is governed, not by expertise, but by common sense and experience; words like "ordinary", "extraordinary" or "abnormal" are not meant to be scientific expressions but assessments of relevance and are thus clearly within the domain of the judge.

Before an expert's opinion is admitted as evidence, the trial judge must be satisfied, as a matter of law, that either the perpetrator of the crime or the accused has distinctive behavioural characteristics such that a comparison of one with the other will be of material assistance in determining innocence or guilt. Although this decision is made on the basis of common sense and experience, as Professor Mewett suggests, it is not made in a vacuum. The trial judge should consider the opinion of the expert and whether the expert is merely expressing a personal opinion or whether the behavioural profile which the expert is putting forward is in common use as a reliable indicator of membership in a distinctive group. Put another way: Has the scientific community developed a standard profile for the offender who commits this type of crime? An affirmative finding on this basis will satisfy the criteria of relevance and necessity. Not only will the expert evidence tend to prove a fact in issue but it will also provide the trier of fact with assistance that is needed. Such evidence will have passed the threshold test of reliability which will generally ensure that the trier of fact does not give it more weight than it deserves. The evidence will qualify as an exception to the exclusionary rule relating to character evidence provided, of course, that the trial judge is satisfied that the proposed opinion is within the field of expertise of the expert witness.

(3) *Application to This Case*

I take the findings of the trial judge to be that a person who committed sexual assaults on young women could not be said to belong to a group possessing behavioural characteristics that are sufficiently distinctive to be of assistance in identifying the perpetrator of the offences charged. Moreover,

nence, c'est-à-dire de l'aide qu'elle apporte au juge des faits en lui permettant de tirer des conclusions. Cette question repose non pas sur l'expertise, mais sur le bon sens et l'expérience; des mots tels «ordinaire», «extraordinaire» ou «anormal» ne sont pas destinés à être des expressions scientifiques, mais plutôt des appréciations de la pertinence. Par conséquent ils relèvent clairement du domaine du juge.

Avant d'admettre en preuve l'opinion d'un expert, le juge du procès doit être convaincu, en droit, que l'auteur du crime ou l'accusé possède des caractéristiques de comportement distinctives de sorte que la comparaison de l'un avec l'autre aidera considérablement à déterminer l'innocence ou la culpabilité. Bien que cette décision repose sur le bon sens et l'expérience, comme le professeur Mewett l'indique, elle n'est pas prise dans le vide. Le juge du procès devrait considérer, d'une part, l'opinion de l'expert et, d'autre part, si ce dernier exprime simplement une opinion personnelle ou si le profil de comportement qu'il décrit est couramment utilisé comme indice fiable de l'appartenance à un groupe distinctif. En d'autres termes, la profession scientifique a-t-elle élaboré un profil type du délinquant qui commet ce genre de crime? Une conclusion affirmative sur ce fondement satisfera aux critères de pertinence et de fiabilité. Non seulement la preuve d'expert tendra à prouver un fait en litige, mais elle offrira aussi au juge des faits l'aide dont il a besoin. Une telle preuve aura satisfait au critère préliminaire de la fiabilité qui fera généralement en sorte que le juge des faits ne lui accorde pas plus de poids qu'elle ne le mérite. La preuve sera considérée comme une exception à la règle d'exclusion relative à la preuve de moralité à condition bien sûr que le juge du procès soit convaincu que l'opinion exprimée se situe dans le domaine d'expertise du témoin expert.

(3) *Application à l'espèce*

À mon sens, le juge du procès a conclu qu'on ne peut dire de la personne qui a commis des agressions sexuelles sur de jeunes femmes qu'elle appartient à un groupe possédant des caractéristiques de comportement suffisamment distinctives pour faciliter l'identification de l'auteur des infrac-

the fact that the alleged perpetrator was a physician did not advance the matter because there is no acceptable body of evidence that doctors who commit sexual assaults fall into a distinctive class with identifiable characteristics. Notwithstanding the opinion of Dr. Hill, the trial judge was also not satisfied that the characteristics associated with the fourth complaint identified the perpetrator as a member of a distinctive group. He was not prepared to accept that the characteristics of that complaint were such that only a psychopath could have committed the act. There was nothing to indicate any general acceptance of this theory. Moreover, there was no material in the record to support a finding that the profile of a pedophile or psychopath has been standardized to the extent that it could be said that it matched the supposed profile of the offender depicted in the charges. The expert's group profiles were not seen as sufficiently reliable to be considered helpful. In the absence of these *indicia* of reliability, it cannot be said that the evidence would be necessary in the sense of usefully clarifying a matter otherwise unaccessible, or that any value it may have had would not be outweighed by its potential for misleading or diverting the jury. Given these findings and applying the principles referred to above, I must conclude that the trial judge was right in deciding as a matter of law that the evidence was inadmissible.

tions reprochées. En outre, le fait que l'auteur allégué du crime est un médecin n'a pas facilité la question parce qu'il n'existe aucune preuve acceptable indiquant que les médecins qui commettent des agressions sexuelles tombent dans une catégorie distinctive à laquelle se rattachent des caractéristiques identifiables. En dépit de l'opinion du Dr Hill, le juge du procès n'était pas non plus convaincu que les caractéristiques reliées à la quatrième plainte identifiaient l'auteur comme membre d'un groupe distinctif. Il n'était pas disposé à accepter que les caractéristiques de cette plainte étaient telles que seul un psychopathe pouvait avoir commis l'acte. Rien ne démontre que cette théorie soit généralement acceptée. Par ailleurs, aucun document dans le dossier ne permettait de conclure que le profil du pédophile ou du psychopathe a été normalisé au point où on pourrait soutenir qu'il correspond au profil présumé du délinquant décrit dans les accusations. Les profils de groupes décrits par l'expert n'ont pas été considérés suffisamment fiables pour être utiles. En l'absence d'indices de fiabilité, on ne pouvait pas dire que la preuve serait nécessaire au sens où elle clarifierait utilement une question qui serait autrement inaccessible, ou que la valeur qu'elle pourrait avoir ne serait pas surpassée par la possibilité qu'elle induise le jury en erreur ou le détourne de ses tâches. Compte tenu de ces conclusions, et appliquant les principes mentionnés ci-dessus, je dois conclure que le juge du procès a conclu à juste titre que, du point de vue juridique, la preuve était inadmissible.

The Court of Appeal also supported the admissibility of the evidence on the basis that Dr. Hill's evidence tended to rebut alleged similarities between the evidence on the respective counts. On this point, Finlayson J.A. stated at p. 178:

> Where, as here, the Crown alleges that the probative value of the similar fact evidence arises from the circumstance that the acts compared are so unusual and strikingly similar that their similarities cannot be attributed to coincidence, the defence is equally entitled to lead evidence as to features of the alleged acts which demonstrate dissimilarities . . . .

La Cour d'appel avait aussi conclu à l'admissibilité de la preuve pour le motif que le témoignage du Dr Hill tendait à réfuter les similitudes alléguées entre la preuve relative aux divers chefs. À cet égard, le juge Finlayson a dit à la p. 178:

> [TRADUCTION] Lorsque, comme en l'espèce, le ministère public allègue que la valeur probante de la preuve de faits similaires naît du fait que les actes comparés sont si inhabituels et d'une similitude si frappante que cette similitude ne peut être attribuée à la coïncidence, la défense a elle aussi le droit de produire une preuve relative aux caractéristiques des actes allégués qui démontrent des différences . . .

The judgment of the Court of Appeal was not supported on this ground either in the respondent's factum or in the oral argument.

The use to which the jury could put the evidence was explained by the trial judge in his charge to the jury. The key passage in the charge in this respect was the following:

> If you conclude when considering any of the specific counts that evidence relating to any or all of the other counts is so similar that common sense dictates the relevancy of such evidence to one or more of the issues I mentioned earlier, then you may not must, draw the inferences to which I have referred. [Emphasis added.]

The similarities, which were detailed by the judge, were with respect to the *modus operandi* of the perpetrator of the acts which were the subject of the individual counts. No objection was taken to this aspect of the charge. This use of the similar fact evidence relates to a different issue from the subject matter of the proposed evidence of Dr. Hill. As discussed above, the dissimilarities addressed in Dr. Hill's proposed evidence are not as to *modus operandi* but rather with respect to the comparative psychological make-up of the respondent on the one hand and the alleged perpetrator of the acts charged, on the other. Furthermore, whether a crime is committed in a manner that identifies the perpetrator by reason of striking similarities in the method employed in the commission of other acts is something that a jury can, generally, assess without the aid of expert evidence. As stated by the trial judge, it is a matter of common sense.

I would allow the appeal, set aside the judgment of the Court of Appeal, restore the convictions and remit the matter to the Court of Appeal for disposition of the sentence appeal.

Appeal allowed.

Solicitor for the appellant: The Ministry of the Attorney General, Toronto.

Le jugement de la Cour d'appel n'a pas été appuyé à cet égard ni dans le mémoire de l'intimé, ni dans les débats.

Dans son exposé au jury, le juge du procès a expliqué l'utilisation que le jury pouvait faire de la preuve. Le passage clé de l'exposé à cet égard est le suivant:

> [TRADUCTION] Si vous déterminez, après avoir considéré un des chefs d'accusation, que la preuve relative à un ou à l'ensemble des autres chefs est semblable au point que le bon sens commande la pertinence d'une telle preuve quant à l'une ou plusieurs questions que j'ai mentionnées précédemment, vous pouvez alors tirer les conclusions que j'ai mentionnées. [Je souligne.]

Les similitudes, expliquées par le juge, portaient sur le *modus operandi* de l'auteur des actes qui étaient l'objet de chefs spécifiques. Aucune objection n'a été soulevée sur cet aspect de l'exposé. Cette utilisation de la preuve de faits similaires porte sur une question différente de l'objet du témoignage proposé du Dr Hill. Comme cela est indiqué plus haut, les différences dont traitait la preuve proposée par le Dr Hill ne concernaient pas le *modus operandi* mais plutôt la constitution psychologique du requérant comparée à celle de l'auteur des actes allégués. En outre, la question de savoir si le crime est commis d'une manière qui identifie l'auteur, en raison de similitudes frappantes dans la méthode utilisée pour perpétrer d'autres actes, peut être appréciée en général par un jury sans l'aide de la preuve d'expert. Comme le juge du procès l'a dit, c'est une question de bon sens.

Je suis d'avis d'accueillir le pourvoi, d'infirmer le jugement de la Cour d'appel, de rétablir les déclarations de culpabilité et de renvoyer l'affaire à la Cour d'appel pour qu'elle tranche l'appel de la sentence.

Pourvoi accueilli.

Procureur de l'appelante: Le ministère du Procureur général, Toronto.

Solicitors for the respondent: Greenspan, Humphrey, Toronto.

Procureurs de l'intimé: Greenspan, Humphrey, Toronto.

White Burgess Langille Inman, carrying on business as WBLI Chartered Accountants and R. Brian Burgess *Appellants*

v.

Abbott and Haliburton Company Limited, A.W. Allen & Son Limited, Berwick Building Supplies Limited, Bishop's Falls Building Supplies Limited, Arthur Boudreau & Fils Ltée, Brennan Contractors & Supplies Ltd., F. J. Brideau & Fils Limitée, Cabot Building Supplies Company (1988) Limited, Robert Churchill Building Supplies Limited, CDL Holdings Limited, formerly Chester Dawe Limited, Fraser Supplies (1980) Ltd., R. D. Gillis Building Supplies Limited, Yvon Godin Ltd., Truro Wood Industries Limited/Home Care Properties Limited, Hann's Hardware and Sporting Goods Limited, Harbour Breton Building Supplies Limited, Hillier's Trades Limited, Hubcraft Building Supplies Limited, Lumbermart Limited, Maple Leaf Farm Supplies Limited, S.W. Mifflin Ltd., Nauss Brothers Limited, O'Leary Farmers' Co-operative Ass'n. Ltd., Pellerin Building Supplies Inc., Pleasant Supplies Incorporated, J. I. Pritchett & Sons Limited, Centre Multi-Décor de Richibucto Ltée, U. J. Robichaud & Sons Woodworkers Limited, Quincaillerie Saint-Louis Ltée, R & J Swinamer's Supplies Limited, 508686 N.B. INC. operating as T.N.T. Insulation and Building Supplies, Taylor Lumber and Building Supplies Limited, Two by Four Lumber Sales Ltd., Walbourne Enterprises Ltd., Western Bay Hardware Limited, White's Construction Limited, D. J. Williams and Sons Limited and Woodland Building Supplies Limited *Respondents*

and

Attorney General of Canada and Criminal Lawyers' Association (Ontario) *Interveners*

White Burgess Langille Inman, faisant affaire sous la raison sociale WBLI Chartered Accountants et R. Brian Burgess *Appelants*

c.

Abbott and Haliburton Company Limited, A.W. Allen & Son Limited, Berwick Building Supplies Limited, Bishop's Falls Building Supplies Limited, Arthur Boudreau & Fils Ltée, Brennan Contractors & Supplies Ltd., F. J. Brideau & Fils Limitée, Cabot Building Supplies Company (1988) Limited, Robert Churchill Building Supplies Limited, CDL Holdings Limited, auparavant Chester Dawe Limited, Fraser Supplies (1980) Ltd., R. D. Gillis Building Supplies Limited, Yvon Godin Ltd., Truro Wood Industries Limited/Home Care Properties Limited, Hann's Hardware and Sporting Goods Limited, Harbour Breton Building Supplies Limited, Hillier's Trades Limited, Hubcraft Building Supplies Limited, Lumbermart Limited, Maple Leaf Farm Supplies Limited, S.W. Mifflin Ltd., Nauss Brothers Limited, O'Leary Farmers' Co-operative Ass'n. Ltd., Pellerin Building Supplies Inc., Pleasant Supplies Incorporated, J. I. Pritchett & Sons Limited, Centre Multi-Décor de Richibucto Ltée, U. J. Robichaud & Sons Woodworkers Limited, Quincaillerie Saint-Louis Ltée, R & J Swinamer's Supplies Limited, 508686 N.B. INC. faisant affaire sous la raison sociale T.N.T. Insulation and Building Supplies, Taylor Lumber and Building Supplies Limited, Two by Four Lumber Sales Ltd., Walbourne Enterprises Ltd., Western Bay Hardware Limited, White's Construction Limited, D. J. Williams and Sons Limited et Woodland Building Supplies Limited *Intimées*

et

Procureur général du Canada et Criminal Lawyers' Association (Ontario) *Intervenants*

Indexed as: White Burgess Langille Inman *v.* Abbott and Haliburton Co.

2015 SCC 23

File No.: 35492.

2014: October 7; 2015: April 30.

Present: McLachlin C.J. and Abella, Rothstein, Cromwell, Moldaver, Wagner and Gascon JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR NOVA SCOTIA

Evidence — Admissibility — Expert evidence — Basic standards for admissibility — Qualified expert — Independence and impartiality — Nature of expert's duty to court — How expert's duty relates to admissibility of expert's evidence — Forensic accountant providing opinion on whether former auditors were negligent in performance of duties — Former auditors applying to strike out expert's affidavit on grounds she was not impartial expert witness — Whether elements of expert's duty to court go to admissibility of evidence rather than simply to its weight — If so, whether there is a threshold admissibility requirement in relation to independence and impartiality.

The shareholders started a professional negligence action against the former auditors of their company after they had retained a different accounting firm, the Kentville office of GT, to perform various accounting tasks and which in their view revealed problems with the former auditors' work. The auditors brought a motion for summary judgment seeking to have the shareholders' action dismissed. In response, the shareholders retained M, a forensic accounting partner at the Halifax office of GT, to review all the relevant materials and to prepare a report of her findings. Her affidavit set out her findings, including her opinion that the auditors had not complied with their professional obligations to the shareholders. The auditors applied to strike out M's affidavit on the grounds that she was not an impartial expert witness.

The motions judge essentially agreed with the auditors and struck out M's affidavit in its entirety. The majority of the Court of Appeal concluded that the motions judge erred in excluding M's affidavit and allowed the appeal.

Répertorié : White Burgess Langille Inman *c.* Abbott and Haliburton Co.

2015 CSC 23

N° du greffe : 35492.

2014 : 7 octobre; 2015 : 30 avril.

Présents : La juge en chef McLachlin et les juges Abella, Rothstein, Cromwell, Moldaver, Wagner et Gascon.

EN APPEL DE LA COUR D'APPEL DE LA NOUVELLE-ÉCOSSE

Preuve — Admissibilité — Preuve d'expert — Normes fondamentales d'admissibilité — Expert qualifié — Indépendance et impartialité — Nature de l'obligation de l'expert envers le tribunal — Rapport entre l'obligation de l'expert et l'admissibilité de son témoignage — Opinion d'une juricomptable sur la négligence possible des vérificateurs précédents dans l'exercice de leurs fonctions — Requête en radiation de l'affidavit de l'expert présentée par les vérificateurs précédents au motif que l'expert n'était pas un témoin expert impartial — Les éléments de l'obligation de l'expert envers le tribunal jouent-ils au regard de l'admissibilité du témoignage plutôt que simplement de la valeur probante de celui-ci? — Dans l'affirmative, l'indépendance et l'impartialité constituent-elles un critère d'admissibilité?

Les actionnaires ont intenté une action pour négligence professionnelle contre les anciens vérificateurs de leur compagnie après avoir engagé un autre cabinet comptable, GT, de Kentville, pour effectuer diverses tâches comptables, qui, selon eux, avaient révélé des erreurs par les vérificateurs précédents. Les vérificateurs ont présenté une requête en jugement sommaire visant à faire rejeter l'action. En réponse, les actionnaires ont fait appel à M, une associée en juricomptabilité du cabinet GT de Halifax, pour qu'elle examine tous les documents pertinents et rédige un rapport de ses constatations. Son affidavit expose ces dernières, notamment que les vérificateurs, selon elle, ne se sont pas acquittés de leurs obligations professionnelles envers les actionnaires. Les vérificateurs ont présenté une requête en radiation de l'affidavit de M au motif qu'elle n'était pas un témoin expert impartial.

Le juge des requêtes s'est dit d'accord avec les vérificateurs pour l'essentiel et a radié intégralement l'affidavit de M. Les juges majoritaires de la Cour d'appel ont conclu que le juge des requêtes avait eu tort d'exclure l'affidavit de M et ont accueilli l'appel.

Held: The appeal should be dismissed.

The inquiry for determining the admissibility of expert opinion evidence is divided into two steps. At the first step, the proponent of the evidence must establish the threshold requirements of admissibility. These are the four factors set out in *R. v. Mohan*, [1994] 2 S.C.R. 9 (relevance, necessity, absence of an exclusionary rule and a properly qualified expert). Evidence that does not meet these threshold requirements should be excluded. At the second discretionary gatekeeping step, the trial judge must decide whether expert evidence that meets the preconditions to admissibility is sufficiently beneficial to the trial process to warrant its admission despite the potential harm to the trial process that may flow from the admission of the expert evidence.

Expert witnesses have a duty to the court to give fair, objective and non-partisan opinion evidence. They must be aware of this duty and able and willing to carry it out. The expert's opinion must be impartial in the sense that it reflects an objective assessment of the questions at hand. It must be independent in the sense that it is the product of the expert's independent judgment, uninfluenced by who has retained him or her or the outcome of the litigation. It must be unbiased in the sense that it does not unfairly favour one party's position over another. The acid test is whether the expert's opinion would not change regardless of which party retained him or her. These concepts, of course, must be applied to the realities of adversary litigation.

Concerns related to the expert's duty to the court and his or her willingness and capacity to comply with it are best addressed initially in the "qualified expert" element of the *Mohan* framework. A proposed expert witness who is unable or unwilling to fulfill his or her duty to the court is not properly qualified to perform the role of an expert. If the expert witness does not meet this threshold admissibility requirement, his or her evidence should not be admitted. Once this threshold is met, however, remaining concerns about an expert witness's compliance with his or her duty should be considered as part of the overall cost-benefit analysis which the judge conducts to carry out his or her gatekeeping role.

Imposing this additional threshold requirement is not intended to and should not result in trials becoming longer or more complex. The trial judge must determine, having regard to both the particular circumstances of the proposed expert and the substance of the proposed evidence, whether the expert is able and willing to carry out his or her primary duty to the court. Absent challenge, the

Arrêt : Le pourvoi est rejeté.

La démarche qui permet de déterminer l'admissibilité du témoignage d'opinion de l'expert est scindée en deux. Dans un premier temps, celui qui veut présenter le témoignage doit démontrer qu'il satisfait aux critères d'admissibilité, soit les quatre critères énoncés dans l'arrêt *R. c. Mohan*, [1994] 2 R.C.S. 9, à savoir la pertinence, la nécessité, l'absence de toute règle d'exclusion et la qualification suffisante de l'expert. Tout témoignage qui ne satisfait pas à ces critères devrait être exclu. Dans un deuxième temps, le juge-gardien exerce son pouvoir discrétionnaire en déterminant si le témoignage d'expert qui satisfait aux conditions préalables à l'admissibilité est assez avantageux pour le procès pour justifier son admission malgré le préjudice potentiel, pour le procès, qui peut découler de son admission.

L'expert a l'obligation envers le tribunal de donner un témoignage d'opinion qui soit juste, objectif et impartial. Il doit être conscient de cette obligation et pouvoir et vouloir s'en acquitter. L'opinion de l'expert doit être impartiale, en ce sens qu'elle découle d'un examen objectif des questions à trancher. Elle doit être indépendante, c'est-à-dire qu'elle doit être le fruit du jugement indépendant de l'expert, non influencée par la partie pour qui il témoigne ou l'issue du litige. Elle doit être exempte de parti pris, en ce sens qu'elle ne doit pas favoriser injustement la position d'une partie au détriment de celle de l'autre. Le critère décisif est que l'opinion de l'expert ne changerait pas, peu importe la partie qui aurait retenu ses services. Ces concepts, il va sans dire, doivent être appliqués aux réalités du débat contradictoire.

C'est sous le volet « qualification suffisante de l'expert » du cadre établi par l'arrêt *Mohan* qu'il convient d'abord d'examiner les préoccupations concernant l'obligation de l'expert envers le tribunal et s'il peut ou veut s'en acquitter. Le témoin expert proposé qui ne peut ou ne veut s'acquitter de son obligation envers le tribunal ne possède pas la qualification suffisante pour exercer ce rôle. S'il ne satisfait pas à ce critère d'admissibilité, son témoignage ne devrait pas être admis. Or, dès lors qu'il y est satisfait, toute réserve qui demeure quant à savoir si l'expert s'est conformé à son obligation devrait être examinée dans le cadre de l'analyse coût-bénéfices qu'effectue le juge dans l'exercice de son rôle de gardien.

L'idée, en imposant ce critère supplémentaire, n'est pas de prolonger ni de complexifier les procès et il ne devrait pas en résulter un tel effet. Le juge de première instance doit déterminer, compte tenu tant de la situation particulière de l'expert que de la teneur du témoignage proposé, si l'expert peut ou veut s'acquitter de sa principale obligation envers le tribunal. En l'absence d'une

expert's attestation or testimony recognizing and accepting the duty will generally be sufficient to establish that this threshold is met. However, if a party opposing admissibility shows that there is a realistic concern that the expert is unable and/or unwilling to comply with his or her duty, the proponent of the evidence has the burden of establishing its admissibility. Exclusion at the threshold stage of the analysis should occur only in very clear cases in which the proposed expert is unable or unwilling to provide the court with fair, objective and non-partisan evidence. Anything less than clear unwillingness or inability to do so should not lead to exclusion, but be taken into account in the overall weighing of costs and benefits of receiving the evidence.

The concept of apparent bias is not relevant to the question of whether or not an expert witness will be unable or unwilling to fulfill its primary duty to the court. When looking at an expert's interest or relationship with a party, the question is not whether a reasonable observer would think that the expert is not independent. The question is whether the relationship or interest results in the expert being unable or unwilling to carry out his or her primary duty to the court to provide fair, non-partisan and objective assistance.

In this case, there was no basis disclosed in the record to find that M's evidence should be excluded because she was not able and willing to provide the court with fair, objective and non-partisan evidence. The majority of the Court of Appeal was correct in concluding that the motions judge committed a palpable and overriding error in determining that M was in a conflict of interest that prevented her from giving impartial and objective evidence.

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Applied: *R. v. Mohan*, [1994] 2 S.C.R. 9; *Mouvement laïque québécois v. Saguenay (City)*, 2015 SCC 16, [2015] 2 S.C.R. 3; **adopted:** *R. v. Abbey*, 2009 ONCA 624, 97 O.R. (3d) 330, leave to appeal refused, [2010] 2 S.C.R. v; **referred to:** *Lord Abinger v. Ashton* (1873), L.R. 17 Eq. 358; *R. v. D.D.*, 2000 SCC 43, [2000] 2 S.C.R. 275; *Graat v. The Queen*, [1982] 2 S.C.R. 819; *R. v. Abbey*, [1982] 2 S.C.R. 24; *R. v. J.-L.J.*, 2000 SCC 51, [2000] 2 S.C.R. 600; *R. v. Sekhon*, 2014 SCC 15, [2014] 1 S.C.R. 272; *Masterpiece Inc. v. Alavida Lifestyles Inc.*, 2011 SCC 27, [2011] 2 S.C.R. 387; *R. v. Trochym*, 2007 SCC 6, [2007] 1 S.C.R. 239; *R. v. Boswell*, 2011 ONCA 283, 85 C.R. (6th) 290; *R. v. C. (M.)*, 2014 ONCA 611, 13 C.R. (7th)

contestation, il est généralement satisfait au critère dès lors que l'expert, dans son attestation ou sa déposition, reconnaît son obligation et l'accepte. Toutefois, si la partie qui s'oppose à l'admission démontre un motif réaliste de croire que l'expert ne peut ou ne veut s'acquitter de son obligation, il revient à la partie qui produit la preuve d'en établir l'admissibilité. La décision d'exclure le témoignage à la première étape de l'analyse pour non-conformité aux critères d'admissibilité ne devrait être prise que dans les cas manifestes où l'expert proposé ne peut ou ne veut fournir une preuve juste, objective et impartiale. Dans les autres cas, le témoignage ne devrait pas être exclu d'office, et son admissibilité sera déterminée à l'issue d'une pondération globale du coût et des bénéfices de son admission.

La notion d'apparence de parti pris n'est pas pertinente lorsqu'il s'agit de déterminer si le témoin expert pourra ou voudra s'acquitter de sa principale obligation envers le tribunal. Lorsque l'on se penche sur l'intérêt d'un expert ou sur ses rapports avec une partie, il ne s'agit pas de se demander si un observateur raisonnable penserait que l'expert est indépendant ou non; il s'agit plutôt de déterminer si la relation de l'expert avec une partie ou son intérêt fait en sorte qu'il ne peut ou ne veut s'acquitter de sa principale obligation envers le tribunal, en l'occurrence apporter au tribunal une aide juste, objective et impartiale.

En l'espèce, le dossier ne révèle aucun élément qui permette de conclure que le témoignage de M devrait être exclu parce que celle-ci ne pouvait ou ne voulait rendre devant le tribunal un témoignage juste, objectif et impartial. La majorité de la Cour d'appel a eu raison de conclure que le juge des requêtes avait commis une erreur manifeste et dominante en estimant que M était dans une situation de conflit d'intérêts qui l'empêchait de rendre un témoignage objectif et impartial.

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Arrêts appliqués : *R. c. Mohan*, [1994] 2 R.C.S. 9; *Mouvement laïque québécois c. Saguenay (Ville)*, 2015 CSC 16, [2015] 2 R.C.S. 3; **arrêt adopté :** *R. c. Abbey*, 2009 ONCA 624, 97 O.R. (3d) 330, autorisation d'appel refusée, [2010] 2 R.C.S. v; **arrêts mentionnés :** *Lord Abinger c. Ashton* (1873), L.R. 17 Eq. 358; *R. c. D.D.*, 2000 CSC 43, [2000] 2 R.C.S. 275; *Graat c. La Reine*, [1982] 2 R.C.S. 819; *R. c. Abbey*, [1982] 2 R.C.S. 24; *R. c. J.-L.J.*, 2000 CSC 51, [2000] 2 R.C.S. 600; *R. c. Sekhon*, 2014 CSC 15, [2014] 1 R.C.S. 272; *Masterpiece Inc. c. Alavida Lifestyles Inc.*, 2011 CSC 27, [2011] 2 R.C.S. 387; *R. c. Trochym*, 2007 CSC 6, [2007] 1 R.C.S. 239; *R. c. Boswell*, 2011 ONCA 283, 85 C.R. (6th) 290; *R. c.*

396; *National Justice Compania Naviera S.A. v. Prudential Assurance Co.*, [1993] 2 Lloyd's Rep. 68, rev'd [1995] 1 Lloyd's Rep. 455; *Fellowes, McNeil v. Kansa General International Insurance Co.* (1998), 40 O.R. (3d) 456; *Royal Trust Corp. of Canada v. Fisherman* (2000), 49 O.R. (3d) 187; *R. v. Docherty*, 2010 ONSC 3628; *Ocean v. Economical Mutual Insurance Co.*, 2010 NSSC 315, 293 N.S.R. (2d) 394; *Handley v. Punnett*, 2003 BCSC 294; *Bank of Montreal v. Citak*, [2001] O.J. No. 1096 (QL); *Dean Construction Co. v. M.J. Dixon Construction Ltd.*, 2011 ONSC 4629, 5 C.L.R. (4th) 240; *Hutchingame v. Johnstone*, 2006 BCSC 271; *Alfano v. Piersanti*, 2012 ONCA 297, 291 O.A.C. 62; *Kirby Lowbed Services Ltd. v. Bank of Nova Scotia*, 2003 BCSC 617; *Gould v. Western Coal Corp.*, 2012 ONSC 5184, 7 B.L.R. (5th) 19; *United City Properties Ltd. v. Tong*, 2010 BCSC 111; *R. v. INCO Ltd.* (2006), 80 O.R. (3d) 594; *R. v. Klassen*, 2003 MBQB 253, 179 Man. R. (2d) 115; *Gallant v. Brake-Patten*, 2012 NLCA 23, 321 Nfld. & P.E.I.R. 77; *R. v. Violette*, 2008 BCSC 920; *Armchair Passenger Transport Ltd. v. Helical Bar Plc*, [2003] EWHC 367; *R. (Factortame Ltd.) v. Secretary of State for Transport*, [2002] EWCA Civ 932, [2003] Q.B. 381; *Gallaher International Ltd. v. Tlais Enterprises Ltd.*, [2007] EWHC 464; *Meat Corp. of Namibia Ltd. v. Dawn Meats (U.K.) Ltd.*, [2011] EWHC 474; *Matchbet Ltd. v. Openbet Retail Ltd.*, [2013] EWHC 3067; *FGT Custodians Pty. Ltd. v. Fagenblat*, [2003] VSCA 33; *Collins Thomson v. Clayton*, [2002] NSWSC 366; *Kirch Communications Pty Ltd. v. Gene Engineering Pty Ltd.*, [2002] NSWSC 485; *SmithKline Beecham (Australia) Pty Ltd. v. Chipman*, [2003] FCA 796, 131 F.C.R. 500; *Rodriguez v. Pacificare of Texas, Inc.*, 980 F.2d 1014 (1993); *Tagatz v. Marquette University*, 861 F.2d 1040 (1988); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (2014); *Agribrands Purina Canada Inc. v. Kasamekas*, 2010 ONSC 166; *R. v. Demetrius*, 2009 CanLII 22797; *International Hi-Tech Industries Inc. v. FANUC Robotics Canada Ltd.*, 2006 BCSC 2011; *Casurina Ltd. Partnership v. Rio Algom Ltd.* (2002), 28 B.L.R. (3d) 44; *Prairie Well Servicing Ltd. v. Tundra Oil and Gas Ltd.*, 2000 MBQB 52, 146 Man. R. (2d) 284; *Deemar v. College of Veterinarians of Ontario*, 2008 ONCA 600, 92 O.R. (3d) 97; *Coady v. Burton Canada Co.*, 2013 NSCA 95, 333 N.S.R. (2d) 348; *Fougere v. Blunden Construction Ltd.*, 2014 NSCA 52, 345 N.S.R. (2d) 385.

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Alan D'Silva, *James Wilson* and *Aaron Kreaden*, for the appellants.

Jon Laxer and *Brian F. P. Murphy*, for the respondents.

Michael H. Morris, for the intervener the Attorney General of Canada.

Matthew Gourlay, for the intervener the Criminal Lawyers' Association (Ontario).

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Alan D'Silva, *James Wilson* et *Aaron Kreaden*, pour les appelants.

Jon Laxer et *Brian F. P. Murphy*, pour les intimées.

Michael H. Morris, pour l'intervenant le procureur général du Canada.

Matthew Gourlay, pour l'intervenante Criminal Lawyers' Association (Ontario).

The judgment of the Court was delivered by

CROMWELL J. —

I. Introduction and Issues

[1] Expert opinion evidence can be a key element in the search for truth, but it may also pose special dangers. To guard against them, the Court over the last 20 years or so has progressively tightened the rules of admissibility and enhanced the trial judge's gatekeeping role. These developments seek to ensure that expert opinion evidence meets certain basic standards before it is admitted. The question on this appeal is whether one of these basic standards for admissibility should relate to the proposed expert's independence and impartiality. In my view, it should.

[2] Expert witnesses have a special duty to the court to provide fair, objective and non-partisan assistance. A proposed expert witness who is unable or unwilling to comply with this duty is not qualified to give expert opinion evidence and should not be permitted to do so. Less fundamental concerns about an expert's independence and impartiality should be taken into account in the broader, overall weighing of the costs and benefits of receiving the evidence.

[3] Applying these principles, I agree with the conclusion reached by the majority of the Nova Scotia Court of Appeal and would therefore dismiss this appeal with costs.

II. Overview of the Facts and Judicial History

A. *Facts and Proceedings*

[4] The appeal arises out of a professional negligence action by the respondents (who I will call the shareholders) against the appellants, the former auditors of their company (I will refer to them as the auditors). The shareholders started the action after they had retained a different accounting firm, the

Version française du jugement de la Cour rendu par

LE JUGE CROMWELL —

I. Introduction et questions en litige

[1] Le témoignage d'expert peut constituer la pièce maîtresse dans la recherche de la vérité tout comme il peut présenter des dangers particuliers. Pour se prémunir contre ces dangers, la Cour depuis une vingtaine d'années resserre graduellement les règles d'admissibilité et renforce le rôle de gardien du juge de première instance. Ainsi, l'admission du témoignage d'expert est subordonnée au respect de certaines normes fondamentales. La question à trancher dans le cadre du présent pourvoi est de savoir si l'indépendance et l'impartialité de l'expert que l'on se propose de citer comme témoin devraient compter au nombre de ces normes fondamentales d'admissibilité. À mon avis elles devraient l'être.

[2] Le témoin expert a l'obligation particulière d'apporter au tribunal une aide juste, objective et impartiale. La personne que l'on se propose de citer à ce titre, mais qui ne peut ou ne veut se conformer à cette obligation, n'a pas la qualification pour témoigner à titre d'expert et ne devrait pas y être autorisée. Des réserves moins fondamentales quant à l'indépendance et à l'impartialité de l'expert devraient jouer dans l'analyse globale des coûts et des bénéfices de l'admission du témoignage.

[3] Appliquant ces principes, je partage la conclusion à laquelle sont parvenus les juges majoritaires de la Cour d'appel de la Nouvelle-Écosse et suis d'avis de rejeter le présent pourvoi avec dépens.

II. Rappel des faits et historique judiciaire

A. *Les faits et la procédure*

[4] Le présent pourvoi découle d'une action pour négligence professionnelle intentée par les intimées (ci-après « les actionnaires ») contre les appelants, les anciens vérificateurs de leur compagnie (ci-après « les vérificateurs »). Les actionnaires ont intenté cette poursuite après avoir engagé un autre cabinet

Kentville office of Grant Thornton LLP, to perform various accounting tasks and which in their view revealed problems with the auditors' previous work. The central allegation in the action is that the auditors' failure to apply generally accepted auditing and accounting standards while carrying out their functions caused financial loss to the shareholders. The main question in the action boils down to whether the auditors were negligent in the performance of their professional duties.

[5] The auditors brought a motion for summary judgment in August of 2010, seeking to have the shareholders' action dismissed. In response, the shareholders retained Susan MacMillan, a forensic accounting partner at the Halifax office of Grant Thornton, to review all the relevant materials, including the documents filed in the action, and to prepare a report of her findings. Her affidavit set out her findings, including her opinion that the auditors had not complied with their professional obligations to the shareholders. The auditors applied to strike out Ms. MacMillan's affidavit on the grounds that she was not an impartial expert witness. They argued that the action comes down to a battle of opinion between two accounting firms — the auditors' and the expert witness's. Ms. MacMillan's firm could be exposed to liability if its approach was not accepted by the court and, as a partner, Ms. MacMillan could be personally liable. Her potential liability if her opinion were not accepted gives her a personal financial interest in the outcome of the litigations and this, in the auditors' submission, ought to disqualify her from testifying.

[6] The proceedings since have been neither summary nor resulted in a judgment. Instead, the litigation has been focused on the expert evidence issue; the summary judgment application has not yet been heard on its merits.

comptable, Grant Thornton srl, de Kentville, pour effectuer diverses tâches comptables, qui, selon eux, avaient révélé des erreurs par les vérificateurs précédents. Les actionnaires reprochent essentiellement aux vérificateurs de ne pas avoir appliqué les normes de vérification et comptables généralement reconnues et de leur avoir ainsi causé une perte. La principale question dans le cadre de l'action est de savoir si les vérificateurs ont fait preuve de négligence dans l'exercice de leurs fonctions.

[5] En août 2010, les vérificateurs ont présenté une requête en jugement sommaire visant à faire rejeter l'action. En réponse, les actionnaires ont fait appel à M^me^ Susan MacMillan, une associée en juricomptabilité du cabinet Grant Thornton de Halifax, pour qu'elle examine tous les documents pertinents, notamment ceux déposés dans le cadre de l'action, et rédige un rapport de ses constatations. Son affidavit expose ces dernières, notamment que les vérificateurs, selon elle, ne se sont pas acquittés de leurs obligations professionnelles envers les actionnaires. Les vérificateurs ont présenté une requête en radiation de l'affidavit de M^me^ MacMillan au motif qu'elle n'était pas un témoin expert impartial. Ils ont fait valoir que l'action se résumait à une bataille d'opinions entre deux cabinets comptables, en l'occurrence celui des vérificateurs et celui du témoin expert. Le cabinet de M^me^ MacMillan pourrait être tenu responsable si sa démarche n'était pas acceptée par le tribunal et, en tant qu'associée, M^me^ MacMillan pourrait être tenue personnellement responsable. Sa responsabilité potentielle — si son opinion n'était pas acceptée — se traduit par un intérêt financier personnel dans le règlement du litige; or, de l'avis des vérificateurs, cela devrait suffire à la rendre inhabile à témoigner.

[6] Depuis, l'instance a été tout sauf sommaire et ne s'est toujours pas soldée par un jugement. Le litige a plutôt porté sur la question du témoignage de l'expert; la requête en jugement sommaire n'a pas encore été entendue sur le fond.

B. *Judgments Below*

(1) Nova Scotia Supreme Court: 2012 NSSC 210, 317 N.S.R. (2d) 283 (Pickup J.)

[7] Pickup J. essentially agreed with the auditors and struck out the MacMillan affidavit in its entirety: para. 106. He found that, in order to be admissible, an expert's evidence "must be, and be seen to be, independent and impartial": para. 99. Applying that test, he concluded that this was one of those "clearest of cases where the reliability of the expert . . . does not meet the threshold requirements for admissibility": para. 101.

(2) Nova Scotia Court of Appeal: 2013 NSCA 66, 330 N.S.R. (2d) 301 (Beveridge J.A., Oland J.A. Concurring; MacDonald C.J.N.S. Dissenting)

[8] The majority of the Court of Appeal concluded that the motions judge erred in excluding Ms. MacMillan's affidavit. Beveridge J.A. wrote that while the court has discretion to exclude expert evidence due to actual bias or partiality, the test adopted by the motions judge — that an expert "must be, and be seen to be, independent and impartial" — was wrong in law. He ought not to have ruled her evidence inadmissible and struck out her affidavit.

[9] MacDonald C.J.N.S., dissenting, would have upheld the motions judge's decision because he had properly articulated and applied the relevant legal principles.

III. Analysis

A. *Overview*

[10] In my view, expert witnesses have a duty to the court to give fair, objective and non-partisan opinion evidence. They must be aware of this duty and able and willing to carry it out. If they do not meet this threshold requirement, their evidence should not be admitted. Once this threshold is met,

B. *Les juridictions inférieures*

(1) Cour suprême de la Nouvelle-Écosse : 2012 NSSC 210, 317 N.S.R. (2d) 283 (le juge Pickup)

[7] Le juge Pickup s'est dit d'accord avec les vérificateurs pour l'essentiel et a radié intégralement l'affidavit de M[me] MacMillan (par. 106). Il était d'avis que, pour être admissible, le témoignage de l'expert [TRADUCTION] « doit être indépendant et impartial et être perçu comme tel » (par. 99) et, partant, a conclu qu'il s'agissait de l'un des « cas les plus évidents où la fiabilité de l'expert [. . .] ne satisfait pas aux critères d'admissibilité » (par. 101).

(2) Cour d'appel de la Nouvelle-Écosse : 2013 NSCA 66, 330 N.S.R. (2d) 301 (le juge Beveridge, avec l'appui de la juge Oland; le juge en chef MacDonald est dissident)

[8] Les juges majoritaires de la Cour d'appel ont conclu que le juge des requêtes avait eu tort d'exclure l'affidavit de M[me] MacMillan. Le juge Beveridge a écrit que, si le tribunal peut, en vertu de son pouvoir discrétionnaire, écarter le témoignage de l'expert pour cause de partialité réelle, le critère retenu par le juge des requêtes, en l'occurrence que l'expert « doit être indépendant et impartial et être perçu comme tel », était mal fondé en droit. Il n'aurait pas dû déclarer inadmissible le témoignage de M[me] MacMillan ni radier son affidavit.

[9] Le juge en chef MacDonald, dissident, était d'avis de confirmer la décision du juge des requêtes, parce que ce dernier avait selon lui exposé et appliqué correctement les principes juridiques pertinents.

III. Analyse

A. *Aperçu*

[10] Selon moi, l'expert a l'obligation envers le tribunal de donner un témoignage d'opinion qui soit juste, objectif et impartial. Il doit être conscient de cette obligation et pouvoir et vouloir s'en acquitter. S'il ne satisfait pas à ce critère, son témoignage ne devrait pas être admis. Or, dès lors qu'il y est satisfait,

however, concerns about an expert witness's independence or impartiality should be considered as part of the overall weighing of the costs and benefits of admitting the evidence. This common law approach is, of course, subject to statutory and related provisions which may establish different rules of admissibility.

B. *Expert Witness Independence and Impartiality*

[11] There have been long-standing concerns about whether expert witnesses hired by the parties are impartial in the sense that they are expressing their own unbiased professional opinion and whether they are independent in the sense that their opinion is the product of their own, independent conclusions based on their own knowledge and judgment: see, e.g., G. R. Anderson, *Expert Evidence* (3rd ed. 2014), at p. 509; S. N. Lederman, A. W. Bryant and M. K. Fuerst, *The Law of Evidence in Canada* (4th ed. 2014), at p. 783. As Sir George Jessel, M.R., put it in the 1870s, "[u]ndoubtedly there is a natural bias to do something serviceable for those who employ you and adequately remunerate you. It is very natural, and it is so effectual, that we constantly see persons, instead of considering themselves witnesses, rather consider themselves as the paid agents of the person who employs them": *Lord Abinger v. Ashton* (1873), L.R. 17 Eq. 358, at p. 374.

[12] Recent experience has only exacerbated these concerns; we are now all too aware that an expert's lack of independence and impartiality can result in egregious miscarriages of justice: *R. v. D.D.*, 2000 SCC 43, [2000] 2 S.C.R. 275, at para. 52. As observed by Beveridge J.A. in this case, *The Commission on Proceedings Involving Guy Paul Morin: Report* (1998) authored by the Honourable Fred Kaufman and the *Inquiry into Pediatric Forensic Pathology in Ontario: Report* (2008) conducted by the Honourable Stephen T. Goudge provide two striking examples where "[s]eemingly solid and impartial, but flawed, forensic scientific opinion has played a prominent role in miscarriages of justice": para. 105. Other reports outline the critical need for impartial and independent expert evidence in civil litigation: *ibid.*, at para. 106; see the Right

les réserves quant à l'indépendance ou à l'impartialité du témoin expert devraient être examinées dans l'évaluation globale des coûts et des bénéfices de l'admission du témoignage. Cette démarche issue de la common law cède le pas bien sûr aux dispositions législatives et connexes établissant dans certains cas des règles d'admissibilité différentes.

B. *Impartialité et indépendance du témoin expert*

[11] Les préoccupations quant à savoir si les témoins experts retenus par les parties sont impartiaux — c'est-à-dire s'ils expriment leur opinion professionnelle sans parti pris — et indépendants — c'est-à-dire si leur opinion est le fruit des conclusions auxquelles ils sont parvenus de façon indépendante en se fondant sur leurs propres connaissances et jugement — ne datent pas d'hier (voir, p. ex., G. R. Anderson, *Expert Evidence* (3e éd. 2014), p. 509; S. N. Lederman, A. W. Bryant et M. K. Fuerst, *The Law of Evidence in Canada* (4e éd. 2014), p. 783). Comme le soulignait Sir George Jessel, maître des rôles, dans les années 1870, [TRADUCTION] « [i]l existe indubitablement une tendance naturelle à faire quelque chose d'utile pour celui qui nous emploie et nous rémunère bien. C'est tout à fait naturel et si infaillible que nous voyons constamment des personnes qui se considèrent, non pas comme des témoins, mais comme les mandataires rémunérés de la personne qui les emploie » (*Lord Abinger c. Ashton* (1873), L.R. 17 Eq. 358, p. 374).

[12] L'expérience récente n'a fait qu'aviver ces préoccupations; nous savons que trop bien que le manque d'indépendance et d'impartialité d'un expert peut donner lieu à de très graves erreurs judiciaires (*R. c. D.D.*, 2000 CSC 43, [2000] 2 R.C.S. 275, par. 52). Comme l'a souligné le juge Beveridge dans la présente affaire, la *Commission sur les poursuites contre Guy Paul Morin : Rapport* (1998), rédigé par l'honorable Fred Kaufman, et le *Rapport de la Commission d'enquête sur la médecine légale pédiatrique en Ontario* (2008), de l'honorable Stephen T. Goudge, donnent deux exemples concrets de cas où [TRADUCTION] « [l]'opinion apparemment solide et impartiale, mais erronée, d'un scientifique expert a joué un rôle de premier plan dans des erreurs judiciaires » (par. 105). D'autres rapports mettent en évidence la nécessité cruciale que l'expert

Honourable Lord Woolf, *Access to Justice: Final Report* (1996); the Honourable Coulter A. Osborne, *Civil Justice Reform Project: Summary of Findings & Recommendations* (2007).

[13] To decide how our law of evidence should best respond to these concerns, we must confront several questions: Should concerns about potentially biased expert opinion go to admissibility or only to weight?; If to admissibility, should these concerns be addressed by a threshold requirement for admissibility, by a judicial discretion to exclude, or both?; At what point do these concerns justify exclusion of the evidence?; And finally, how is our response to these concerns integrated into the existing legal framework governing the admissibility of expert opinion evidence? To answer these questions, we must first consider the existing legal framework governing admissibility, identify the duties that an expert witness has to the court and then turn to how those duties are best reflected in that legal framework.

C. *The Legal Framework*

(1) The Exclusionary Rule for Opinion Evidence

[14] To the modern general rule that all relevant evidence is admissible there are many qualifications. One of them relates to opinion evidence, which is the subject of a complicated exclusionary rule. Witnesses are to testify as to the facts which they perceived, not as to the inferences — that is, the opinions — that they drew from them. As one great evidence scholar put it long ago, it is "for the jury to form opinions, and draw inferences and conclusions, and not for the witness": J. B. Thayer, *A Preliminary Treatise on Evidence at the Common Law* (1898; reprinted 1969), at p. 524; see also C. Tapper, *Cross and Tapper on Evidence* (12th ed. 2010), at p. 530. While various rationales have been offered for this exclusionary rule, the most convincing is probably that these ready-formed inferences are not helpful to the trier of fact and might even be misleading: see, e.g., *Graat v. The Queen*, [1982] 2

soit impartial et indépendant dans les procès civils (*ibid.*, par. 106; voir le très honorable lord Woolf, *Access to Justice : Final Report* (1996); l'honorable Coulter A. Osborne, *Projet de réforme du système de justice civile : Résumé des conclusions et des recommandations* (2007)).

[13] Pour déterminer la meilleure solution en droit de la preuve à ces préoccupations, il nous faut nous poser plusieurs questions. Est-ce que les réserves au sujet du parti pris possible d'un expert jouent au regard de l'admissibilité de son témoignage ou seulement de la valeur probante de ce dernier? Dans le premier cas, devrait-on y répondre par un critère d'admissibilité, par un pouvoir discrétionnaire permettant d'écarter la preuve ou les deux? Quand justifient-elles que soit exclu un témoignage? Enfin, comment la solution s'inscrit-elle dans le cadre juridique actuel régissant l'admissibilité des témoignages d'experts? Pour répondre à ces questions, nous devons d'abord nous pencher sur ce cadre juridique, circonscrire les obligations du témoin envers le tribunal, puis voir comment ces dernières s'intègrent le mieux dans le cadre juridique.

C. *Le cadre juridique*

(1) La règle d'exclusion des témoignages d'opinion

[14] La règle générale moderne selon laquelle toute preuve pertinente est admissible est assortie de nombreuses exceptions. L'une d'elles a trait au témoignage d'opinion, lequel fait l'objet d'une règle d'exclusion complexe. La déposition des témoins doit relater les faits qu'ils ont perçus, et non présenter les inférences, ou opinions, qu'ils en tirent. Comme l'a dit il y a longtemps un éminent spécialiste de la preuve, [TRADUCTION] « c'est au jury de se faire une opinion et de tirer des inférences et des conclusions, pas au témoin » (J. B. Thayer, *A Preliminary Treatise on Evidence at the Common Law* (1898; réimprimé 1969), p. 524; voir également C. Tapper, *Cross and Tapper on Evidence* (12e éd. 2010), p. 530). Même si plusieurs raisons ont été avancées pour expliquer cette règle d'exclusion, la plus convaincante est probablement celle selon laquelle ces inférences toutes faites ne sont

S.C.R. 819, at p. 836; *Halsbury's Laws of Canada: Evidence* (2014 Reissue), at para. HEV-137 "General rule against opinion evidence".

[15] Not all opinion evidence is excluded, however. Most relevant for this case is the exception for expert opinion evidence on matters requiring specialized knowledge. As Prof. Tapper put it, "the law recognizes that, so far as matters calling for special knowledge or skill are concerned, judges and jurors are not necessarily equipped to draw true inferences from facts stated by witnesses. A witness is therefore allowed to state his opinion about such matters, provided he is expert in them": p. 530; see also *R. v. Abbey*, [1982] 2 S.C.R. 24, at p. 42.

(2) The Current Legal Framework for Expert Opinion Evidence

[16] Since at least the mid-1990s, the Court has responded to a number of concerns about the impact on the litigation process of expert evidence of dubious value. The jurisprudence has clarified and tightened the threshold requirements for admissibility, added new requirements in order to assure reliability, particularly of novel scientific evidence, and emphasized the important role that judges should play as "gatekeepers" to screen out proposed evidence whose value does not justify the risk of confusion, time and expense that may result from its admission.

[17] We can take as the starting point for these developments the Court's decision in *R. v. Mohan*, [1994] 2 S.C.R. 9. That case described the potential dangers of expert evidence and established a four-part threshold test for admissibility. The dangers are well known. One is that the trier of fact will inappropriately defer to the expert's opinion rather

pas utiles au juge des faits et peuvent même l'induire en erreur (voir, p. ex., *Graat c. La Reine*, [1982] 2 R.C.S. 819, p. 836; *Halsbury's Laws of Canada : Evidence* (2014 réédition), par. HEV-137 « General rule against opinion evidence »).

[15] Cependant, ce ne sont pas tous les témoignages d'opinion qui sont exclus. L'exception qui nous intéresse plus particulièrement dans le présent pourvoi est celle qui s'applique au témoignage d'opinion d'un expert sur des questions qui exigent des connaissances spécialisées. Pour reprendre les propos du professeur Tapper, [TRADUCTION] « le droit reconnaît que, dans la mesure où les questions exigent des connaissances ou des compétences particulières, les juges et les jurés ne sont pas forcément en mesure de tirer une véritable conclusion d'après les faits relatés par les témoins. Le témoin est par conséquent admis à faire part de son opinion sur ces questions, pourvu qu'il soit un expert en la matière » (p. 530; voir également *R. c. Abbey*, [1982] 2 R.C.S. 24, p. 42).

(2) Le cadre juridique actuel régissant le témoignage d'opinion d'un expert

[16] Depuis au moins le milieu des années 1990, la Cour a répondu à nombre de préoccupations concernant l'incidence d'une preuve d'expert d'une valeur douteuse sur le déroulement de l'instance. La jurisprudence a clarifié et resserré les critères d'admissibilité, établi de nouvelles exigences de fiabilité, notamment en ce qui concerne la preuve issue de sciences nouvelles, et renforcé l'important rôle de « gardien » du juge qui consiste à écarter d'emblée les témoignages dont la valeur ne justifie pas la confusion, la lenteur et les frais que leur admission risque de causer.

[17] Nous pouvons prendre comme point de départ de cette nouvelle tendance la décision de la Cour dans l'affaire *R. c. Mohan*, [1994] 2 R.C.S. 9. Cet arrêt a mis en lumière les dangers du témoignage d'expert et établi un critère à quatre volets pour en évaluer l'admissibilité. Ces dangers sont bien connus. Il y a notamment le risque que le juge des faits

than carefully evaluate it. As Sopinka J. observed in *Mohan*:

> There is a danger that expert evidence will be misused and will distort the fact-finding process. Dressed up in scientific language which the jury does not easily understand and submitted through a witness of impressive antecedents, this evidence is apt to be accepted by the jury as being virtually infallible and as having more weight than it deserves. [p. 21]

(See also *D.D.*, at para. 53; *R. v. J.-L.J.*, 2000 SCC 51, [2000] 2 S.C.R. 600, at paras. 25-26; *R. v. Sekhon*, 2014 SCC 15, [2014] 1 S.C.R. 272, at para. 46.)

[18] The point is to preserve trial by judge and jury, not devolve to trial by expert. There is a risk that the jury "will be unable to make an effective and critical assessment of the evidence": *R. v. Abbey*, 2009 ONCA 624, 97 O.R. (3d) 330, at para. 90, leave to appeal refused, [2010] 2 S.C.R. v. The trier of fact must be able to use its "informed judgment", not simply decide on the basis of an "act of faith" in the expert's opinion: *J.-L.J.*, at para. 56. The risk of "attornment to the opinion of the expert" is also exacerbated by the fact that expert evidence is resistant to effective cross-examination by counsel who are not experts in that field: *D.D.*, at para. 54. The cases address a number of other related concerns: the potential prejudice created by the expert's reliance on unproven material not subject to cross-examination (*D.D.*, at para. 55); the risk of admitting "junk science" (*J.-L.J.*, at para. 25); and the risk that a "contest of experts" distracts rather than assists the trier of fact (*Mohan*, at p. 24). Another well-known danger associated with the admissibility of expert evidence is that it may lead to an inordinate expenditure of time and money: *Mohan*, at p. 21; *D.D.*, at para. 56; *Masterpiece Inc. v. Alavida Lifestyles Inc.*, 2011 SCC 27, [2011] 2 S.C.R. 387, at para. 76.

[19] To address these dangers, *Mohan* established a basic structure for the law relating to the admissibility

s'en remette inconsidérément à l'opinion de l'expert au lieu de l'évaluer avec circonspection. Comme le souligne le juge Sopinka dans l'arrêt *Mohan* :

> La preuve d'expert risque d'être utilisée à mauvais escient et de fausser le processus de recherche des faits. Exprimée en des termes scientifiques que le jury ne comprend pas bien et présentée par un témoin aux qualifications impressionnantes, cette preuve est susceptible d'être considérée par le jury comme étant pratiquement infaillible et comme ayant plus de poids qu'elle ne le mérite. [p. 21]

(Voir également *D.D.*, par. 53; *R. c. J.-L.J.*, 2000 CSC 51, [2000] 2 R.C.S. 600, par. 25-26; *R. c. Sekhon*, 2014 CSC 15, [2014] 1 R.C.S. 272, par. 46.)

[18] Il s'agit de préserver le procès devant juge et jury, et non pas d'y substituer le procès instruit par des experts. Il y a un risque que le jury [TRADUCTION] « soit incapable de faire un examen critique et efficace de la preuve » (*R. c. Abbey*, 2009 ONCA 624, 97 O.R. (3d) 330, par. 90, autorisation d'appel refusée, [2010] 2 R.C.S. v). Le juge des faits doit faire appel à son « jugement éclairé » plutôt que simplement trancher la question sur le fondement d'un « acte de confiance » à l'égard de l'opinion de l'expert (*J.-L.J.*, par. 56). Le danger de « s'en remettre à l'opinion de l'expert » est également exacerbé par le fait que la preuve d'expert est imperméable au contre-interrogatoire efficace par des avocats qui ne sont pas des experts dans ce domaine (*D.D.*, par. 54). La jurisprudence aborde un certain nombre d'autres problèmes connexes : le préjudice qui pourrait éventuellement découler d'une opinion d'expert fondée sur des informations qui ne sont pas attestées sous serment et qui ne peuvent pas faire l'objet d'un contre-interrogatoire (*D.D.*, par. 55); le danger d'admettre en preuve de la « science de pacotille » (*J.-L.J.*, par. 25); le risque qu'un « concours d'experts » ne distraie le juge des faits au lieu de l'aider (*Mohan*, p. 24). Un autre danger bien connu associé à l'admission de la preuve d'expert est le fait qu'elle peut exiger un délai et des frais démesurés (*Mohan*, p. 21; *D.D.*, par. 56; *Masterpiece Inc. c. Alavida Lifestyles Inc.*, 2011 CSC 27, [2011] 2 R.C.S. 387, par. 76).

[19] Pour parer à ces dangers, la Cour dans l'arrêt *Mohan* a établi une structure de base à deux volets

of expert opinion evidence. That structure has two main components. First, there are four threshold requirements that the proponent of the evidence must establish in order for proposed expert opinion evidence to be admissible: (1) relevance; (2) necessity in assisting the trier of fact; (3) absence of an exclusionary rule; and (4) a properly qualified expert (*Mohan*, at pp. 20-25; see also *Sekhon*, at para. 43). *Mohan* also underlined the important role of trial judges in assessing whether otherwise admissible expert evidence should be excluded because its probative value was overborne by its prejudicial effect — a residual discretion to exclude evidence based on a cost-benefit analysis: p. 21. This is the second component, which the subsequent jurisprudence has further emphasized: Lederman, Bryant and Fuerst, at pp. 789-90; *J.-L.J.*, at para. 28.

[20] *Mohan* and the jurisprudence since, however, have not explicitly addressed how this "cost-benefit" component fits into the overall analysis. The reasons in *Mohan* engaged in a cost-benefit analysis with respect to particular elements of the four threshold requirements, but they also noted that the cost-benefit analysis could be an aspect of exercising the overall discretion to exclude evidence whose probative value does not justify its admission in light of its potentially prejudicial effects: p. 21. The jurisprudence since *Mohan* has also focused on particular aspects of expert opinion evidence, but again without always being explicit about where additional concerns fit into the analysis. The unmistakable overall trend of the jurisprudence, however, has been to tighten the admissibility requirements and to enhance the judge's gatekeeping role.

[21] So, for example, the necessity threshold criterion was emphasized in cases such as *D.D.* The majority underlined that the necessity requirement exists "to ensure that the dangers associated with expert evidence are not lightly tolerated" and that "[m]ere relevance or 'helpfulness' is not enough": para. 46. Other cases have addressed the reliability of the science underlying an opinion and indeed technical evidence in general: *J.-L.J.*; *R. v. Trochym*, 2007 SCC 6, [2007] 1 S.C.R. 239. The question remains, however, as to where the cost-benefit analysis

définissant les règles d'admissibilité du témoignage d'opinion d'un expert. En premier lieu, celui qui cherche à faire admettre une preuve d'opinion émanant d'un expert doit démontrer qu'elle satisfait à quatre critères : (1) la pertinence; (2) la nécessité d'aider le juge des faits; (3) l'absence de toute règle d'exclusion; (4) la qualification suffisante de l'expert (*Mohan*, p. 20-25; voir également *Sekhon*, par. 43). L'arrêt *Mohan* insiste par ailleurs sur le rôle important du juge du procès pour déterminer si une preuve d'expert par ailleurs admissible devrait être exclue parce que sa valeur probante est surpassée par son effet préjudiciable — un pouvoir discrétionnaire résiduel permettant d'exclure une preuve à l'issue d'une analyse coût-bénéfices (p. 21). Il s'agit du second volet de la structure, mis en évidence par la jurisprudence ultérieure (Lederman, Bryant et Fuerst, p. 789-790; *J.-L.J.*, par. 28).

[20] L'arrêt *Mohan* et la jurisprudence ultérieure ne précisent toutefois pas comment cette analyse « du coût et des bénéfices » s'inscrit dans l'analyse globale. La Cour dans cet arrêt procède à l'analyse coût-bénéfices relativement à certains des quatre critères, mais elle fait aussi observer qu'une telle analyse peut relever de l'exercice d'un pouvoir discrétionnaire général qui permet d'exclure une preuve dont la valeur probante ne justifie pas son admission, compte tenu de ses effets potentiellement préjudiciables (p. 21). Depuis l'arrêt *Mohan*, la jurisprudence s'est également intéressée à des aspects particuliers du témoignage d'opinion d'un expert, mais souvent sans expliciter la place qu'occupent ces autres préoccupations dans l'analyse. Cependant, la jurisprudence, dans son ensemble, tend indubitablement à resserrer les critères d'admissibilité et à renforcer le rôle de gardien du juge.

[21] Par exemple, le critère de nécessité a été mis en évidence dans des décisions telles que *D.D.* La majorité y souligne que l'exigence de nécessité « vise à ce que les dangers liés à la preuve d'expert ne soient pas traités à la légère », ajoutant que « [l]a simple pertinence ou "utilité" ne suffit pas » (par. 46). D'autres décisions ont abordé la fiabilité des principes scientifiques à la base d'une opinion et, en fait, des éléments de preuve techniques en général (*J.-L.J.*; *R. c. Trochym*, 2007 CSC 6, [2007] 1 R.C.S. 239). Toutefois, on ne sait toujours pas où exactement,

and concerns such as those about reliability fit into the overall analysis.

[22] *Abbey* (ONCA) introduced helpful analytical clarity by dividing the inquiry into two steps. With minor adjustments, I would adopt that approach.

[23] At the first step, the proponent of the evidence must establish the threshold requirements of admissibility. These are the four *Mohan* factors (relevance, necessity, absence of an exclusionary rule and a properly qualified expert) and in addition, in the case of an opinion based on novel or contested science or science used for a novel purpose, the reliability of the underlying science for that purpose: *J.-L.J.*, at paras. 33, 35-36 and 47; *Trochym*, at para. 27; Lederman, Bryant and Fuerst, at pp. 788-89 and 800-801. Relevance at this threshold stage refers to logical relevance: *Abbey* (ONCA), at para. 82; *J.-L.J.*, at para. 47. Evidence that does not meet these threshold requirements should be excluded. Note that I would retain necessity as a threshold requirement: *D.D.*, at para. 57; see D. M. Paciocco and L. Stuesser, *The Law of Evidence* (7th ed. 2015), at pp. 209-10; *R. v. Boswell*, 2011 ONCA 283, 85 C.R. (6th) 290, at para. 13; *R. v. C. (M.)*, 2014 ONCA 611, 13 C.R. (7th) 396, at para. 72.

[24] At the second discretionary gatekeeping step, the judge balances the potential risks and benefits of admitting the evidence in order to decide whether the potential benefits justify the risks. The required balancing exercise has been described in various ways. In *Mohan*, Sopinka J. spoke of the "reliability versus effect factor" (p. 21), while in *J.-L.J.*, Binnie J. spoke about "relevance, reliability and necessity" being "measured against the counterweights of consumption of time, prejudice and confusion": para. 47. Doherty J.A. summed it up well in *Abbey*, stating that the "trial judge must decide whether expert evidence that meets the preconditions to admissibility is sufficiently beneficial to the trial process to warrant its admission despite the potential harm to the trial process that may flow from the admission of the expert evidence": para. 76.

dans l'analyse globale, s'inscrivent l'analyse coût-bénéfices et les préoccupations comme celles relatives à la fiabilité.

[22] L'arrêt *Abbey* (ONCA) a apporté des précisions utiles en scindant la démarche en deux temps. Je suis d'avis de l'adopter, à peu de choses près.

[23] Dans un premier temps, celui qui veut présenter le témoignage doit démontrer qu'il satisfait aux critères d'admissibilité, soit les quatre critères énoncés dans l'arrêt *Mohan*, à savoir la pertinence, la nécessité, l'absence de toute règle d'exclusion et la qualification suffisante de l'expert. De plus, dans le cas d'une opinion fondée sur une science nouvelle ou contestée ou sur une science utilisée à des fins nouvelles, la fiabilité des principes scientifiques étayant la preuve doit être démontrée (*J.-L.J.*, par. 33, 35-36 et 47; *Trochym*, par. 27; Lederman, Bryant et Fuerst, p. 788-789 et 800-801). Le critère de la pertinence, à ce stade, s'entend de la pertinence logique (*Abbey* (ONCA), par. 82; *J.-L.J.*, par. 47). Tout témoignage qui ne satisfait pas à ces critères devrait être exclu. Il est à noter qu'à mon avis, la nécessité demeure un critère (*D.D.*, par. 57; voir D. M. Paciocco et L. Stuesser, *The Law of Evidence* (7e éd. 2015), p. 209-210; *R. c. Boswell*, 2011 ONCA 283, 85 C.R. (6th) 290, par. 13; *R. c. C. (M.)*, 2014 ONCA 611, 13 C.R. (7th) 396, par. 72).

[24] Dans un deuxième temps, le juge-gardien exerce son pouvoir discrétionnaire en soupesant les risques et les bénéfices éventuels que présente l'admission du témoignage, afin de décider si les premiers sont justifiés par les seconds. Cet exercice nécessaire de pondération a été décrit de plusieurs façons. Dans l'arrêt *Mohan*, le juge Sopinka parle du « facteur fiabilité-effet » (p. 21), tandis que, dans l'arrêt *J.-L.J.*, le juge Binnie renvoie à « la pertinence, la fiabilité et la nécessité par rapport au délai, au préjudice, à la confusion qui peuvent résulter » (par. 47). Le juge Doherty résume bien la question dans l'arrêt *Abbey*, lorsqu'il explique que [TRADUCTION] « le juge du procès doit décider si le témoignage d'expert qui satisfait aux conditions préalables à l'admissibilité est assez avantageux pour le procès pour justifier son admission malgré le préjudice potentiel, pour le procès, qui peut découler de son admission » (par. 76).

[25] With this delineation of the analytical framework, we can turn to the nature of an expert's duty to the court and where it fits into that framework.

D. *The Expert's Duty to the Court or Tribunal*

[26] There is little controversy about the broad outlines of the expert witness's duty to the court. As Anderson writes, "[t]he duty to provide independent assistance to the Court by way of objective unbiased opinion has been stated many times by common law courts around the world": p. 227. I would add that a similar duty exists in the civil law of Quebec: J.-C. Royer and S. Lavallée, *La preuve civile* (4th ed. 2008), at para. 468; D. Béchard, with the collaboration of J. Béchard, *L'expert* (2011), c. 9; *An Act to establish the new Code of Civil Procedure*, S.Q. 2014, c. 1, art. 22 (not yet in force); L. Chamberland, *Le nouveau Code de procédure civile commenté* (2014), at pp. 14 and 121.

[27] One influential statement of the elements of this duty are found in the English case *National Justice Compania Naviera S.A. v. Prudential Assurance Co.*, [1993] 2 Lloyd's Rep. 68 (Q.B.). Following an 87-day trial, Cresswell J. believed that a misunderstanding of the duties and responsibilities of expert witnesses contributed to the length of the trial. He listed in *obiter dictum* duties and responsibilities of experts, the first two of which have particularly influenced the development of Canadian law:

1. Expert evidence presented to the Court should be, and should be seen to be, the independent product of the expert uninfluenced as to form or content by the exigencies of litigation . . . .

2. An expert witness should provide independent assistance to the Court by way of objective unbiased opinion in relation to matters within his [or her] expertise . . . . An expert witness in the High Court should

[25] Le cadre analytique ainsi délimité, penchons-nous sur la nature de l'obligation de l'expert envers le tribunal et voyons comment elle s'inscrit dans ce cadre.

D. *L'obligation de l'expert envers le tribunal*

[26] Les grandes lignes de l'obligation du témoin expert envers le tribunal sont peu contestées. Comme Anderson l'écrit : [TRADUCTION] « L'obligation de fournir une aide indépendante au tribunal sous la forme d'avis objectif et exempt de parti pris a été énoncée à de nombreuses reprises par les tribunaux de common law un peu partout dans le monde » (p. 227). J'ajouterais qu'une obligation semblable existe en droit civil québécois (J.-C. Royer et S. Lavallée, *La preuve civile* (4e éd. 2008), par. 468; D. Béchard, avec la collaboration de J. Béchard, *L'expert* (2011), c. 9; *Loi instituant le nouveau Code de procédure civile*, L.Q. 2014, c. 1, art. 22 (non en vigueur); L. Chamberland, *Le nouveau Code de procédure civile commenté* (2014), p. 14 et 121).

[27] On trouve dans l'arrêt anglais *National Justice Compania Naviera S.A. c. Prudential Assurance Co.*, [1993] 2 Lloyd's Rep. 68 (Q.B.), un énoncé des éléments de cette obligation qui fait autorité. Au terme d'un procès de 87 jours, le juge Cresswell a conclu qu'une méconnaissance des obligations et responsabilités des témoins experts avait contribué à prolonger le procès. Il a dressé, dans une remarque incidente, une liste des obligations et responsabilités des experts, dont les deux premiers points ont particulièrement influencé l'évolution du droit canadien :

[TRADUCTION]

1. Le témoignage de l'expert présenté à la Cour devrait être le produit indépendant de l'expert n'ayant subi quant à la forme ou au fond aucune influence dictée par les exigences du litige et être perçu comme tel . . .

2. Le rôle du témoin expert consiste à fournir une aide indépendante au tribunal sous la forme d'avis objectif et exempt de parti pris sur des questions relevant de son champ d'expertise [. . .] La personne qui témoigne

never assume the role of an advocate. [Emphasis added; citation omitted; p. 81.]

(These duties were endorsed on appeal: [1995] 1 Lloyd's Rep. 455 (C.A.), at p. 496.)

[28] Many provinces and territories have provided explicit guidance related to the duty of expert witnesses. In Nova Scotia, for example, the *Civil Procedure Rules* require that an expert's report be signed by the expert who must make (among others) the following representations to the court: that the expert is providing an objective opinion for the assistance of the court; that the expert is prepared to apply independent judgment when assisting the court; and that the report includes everything the expert regards as relevant to the expressed opinion and draws attention to anything that could reasonably lead to a different conclusion (r. 55.04(1)(a), (b) and (c)). While these requirements do not affect the rules of evidence by which expert opinion is determined to be admissible or inadmissible, they provide a convenient summary of a fairly broadly shared sense of the duties of an expert witness to the court.

[29] There are similar descriptions of the expert's duty in the civil procedure rules in other Canadian jurisdictions: Anderson, at p. 227; *The Queen's Bench Rules* (Saskatchewan), r. 5-37; *Supreme Court Civil Rules*, B.C. Reg. 168/2009, r. 11-2(1); *Rules of Civil Procedure*, R.R.O. 1990, Reg. 194, r. 4.1.01(1); *Rules of Court*, Y.O.I.C. 2009/65, r. 34(23); *An Act to establish the new Code of Civil Procedure*, art. 22. Moreover, the rules in Saskatchewan, British Columbia, Ontario, Nova Scotia, Prince Edward Island, Quebec and the Federal Courts require experts to certify that they are aware of and will comply with their duty to the court: Anderson, at p. 228; Saskatchewan *Queen's Bench Rules*, r. 5-37(3); British Columbia *Supreme Court Civil Rules*, r. 11-2(2); Ontario *Rules of Civil Procedure*, r. 53.03(2.1); Nova Scotia *Civil Procedure Rules*, r. 55.04(1)(a); Prince Edward Island *Rules of Civil Procedure*, r. 53.03(3)(g); *An Act to establish the new Code of*

comme expert devant la Haute Cour ne doit jamais s'arroger le rôle de défenseur. [Je souligne; référence omise; p. 81.]

(La Cour d'appel a confirmé ces obligations ([1995] 1 Lloyd's Rep. 455 (C.A.), p. 496).)

[28] Plusieurs provinces et territoires ont des directives expresses en ce qui concerne l'obligation du témoin expert. En Nouvelle-Écosse, par exemple, les *Règles de procédure civile* prévoient que le rapport d'expert, signé par ce dernier, déclare notamment qu'il fournit une opinion objective pour prêter assistance à la cour; qu'il est disposé à se former un jugement indépendant dans l'assistance qu'il prête à la cour; que son rapport comprend tout ce qu'il considère comme pertinent par rapport à l'opinion exprimée et attire l'attention sur tout ce qui pourrait mener raisonnablement à une conclusion différente (al. 55.04(1)a), b) et c)). Même si ces exigences n'ont aucune incidence sur les règles de preuve sur l'admissibilité d'une opinion d'expert, elles résument bien la conception assez largement partagée de l'obligation d'un témoin expert envers le tribunal.

[29] L'obligation de l'expert est définie de façon similaire dans les règles de procédure civile d'autres provinces et territoires du Canada (Anderson, p. 227; *Règles de la Cour du Banc de la Reine* de la Saskatchewan, règle 5-37; *Supreme Court Civil Rules*, B.C. Reg. 168/2009, par. 11-2(1); *Règles de procédure civile*, R.R.O. 1990, Règl. 194, par. 4.1.01(1); *Règles de procédure*, Y.D. 2009/65, par. 34(23); *Loi instituant le nouveau Code de procédure civile*, art. 22). De plus, les règles de la Saskatchewan, de la Colombie-Britannique, de l'Ontario, de la Nouvelle-Écosse, de l'Île-du-Prince-Édouard, du Québec et des Cours fédérales en la matière exigent que les experts certifient qu'ils sont informés de leur obligation envers le tribunal et s'en acquitteront (Anderson, p. 228; *Règles de la Cour du Banc de la Reine* de la Saskatchewan, par. 5-37(3); *Supreme Court Civil Rules* de la Colombie-Britannique, par. 11-2(2); *Règles de procédure civile* de l'Ontario,

Civil Procedure, art. 235 (not yet in force); *Federal Courts Rules*, SOR/98-106, r. 52.2(1)(*c*).

[30] The formulation in the Ontario *Rules of Civil Procedure* is perhaps the most succinct and complete statement of the expert's duty to the court: to provide opinion evidence that is fair, objective and non-partisan (r. 4.1.01(1)(a)). The *Rules* are also explicit that this duty to the court prevails over any obligation owed by the expert to a party: r. 4.1.01(2). Likewise, the newly adopted *Act to establish the new Code of Civil Procedure* of Quebec explicitly provides, as a guiding principle, that the expert's duty to the court overrides the parties' interests, and that the expert must fulfill his or her primary duty to the court "objectively, impartially and thoroughly": art. 22; Chamberland, at pp. 14 and 121.

[31] Many of the relevant rules of court simply reflect the duty that an expert witness owes to the court at common law: Anderson, at p. 227. In my opinion, this is true of the Nova Scotia rules that apply in this case. Of course, it is always open to each jurisdiction to impose different rules of admissibility, but in the absence of a clear indication to that effect, the common law rules apply in common law cases. I note that in Nova Scotia, the *Civil Procedure Rules* explicitly provide that they do not change the rules of evidence by which the admissibility of expert opinion evidence is determined: r. 55.01(2).

[32] Underlying the various formulations of the duty are three related concepts: impartiality, independence and absence of bias. The expert's opinion must be impartial in the sense that it reflects an objective assessment of the questions at hand. It must be independent in the sense that it is the product of the expert's independent judgment, uninfluenced by who has retained him or her or the outcome of the litigation. It must be unbiased in the sense that it does not unfairly favour one party's

par. 53.03(2.1); *Règles de procédure civile* de la Nouvelle-Écosse, al. 55.04(1)a); *Rules of Civil Procedure* de l'Île-du-Prince-Édouard, al. 53.03(3)(g); *Loi instituant le nouveau Code de procédure civile*, art. 235 (non en vigueur); *Règles des Cours fédérales*, DORS/98-106, al. 52.2(1)*c*)).

[30] Les *Règles de procédure civile* de l'Ontario énoncent sans doute le plus succinctement et complètement l'obligation de l'expert envers le tribunal, en l'occurrence celle de rendre un témoignage d'opinion qui soit équitable, objectif et impartial (al. 4.1.01(1)a)). Les *Règles* prévoient également expressément que cette obligation l'emporte sur toute obligation de l'expert envers la partie qui l'a engagé (par. 4.1.01(2)). De même, la *Loi instituant le nouveau Code de procédure civile* du Québec prévoit expressément, parmi ses principes directeurs, que la mission première de l'expert envers le tribunal prime les intérêts des parties et qu'il doit l'accomplir « avec objectivité, impartialité et rigueur » (art. 22; Chamberland, p. 14 et 121).

[31] Bon nombre de règles de procédure ne font que reprendre l'obligation à laquelle le témoin expert est tenu envers le tribunal en common law (Anderson, p. 227). À mon avis, c'est le cas des *Règles* de la Nouvelle-Écosse en la matière. Bien sûr, il est loisible à chaque province ou territoire d'établir des règles d'admissibilité différentes, mais à défaut d'indication claire en ce sens, ce sont les règles de la common law qui s'appliquent dans les affaires de common law. Je souligne qu'en Nouvelle-Écosse, les *Règles de procédure civile* disposent expressément qu'elles n'ont aucune incidence sur les règles de preuve servant à déterminer si l'opinion d'expert est admissible (par. 55.01(2)).

[32] Trois concepts apparentés sont à la base des diverses définitions de l'obligation de l'expert, à savoir l'impartialité, l'indépendance et l'absence de parti pris. L'opinion de l'expert doit être impartiale, en ce sens qu'elle découle d'un examen objectif des questions à trancher. Elle doit être indépendante, c'est-à-dire qu'elle doit être le fruit du jugement indépendant de l'expert, non influencée par la partie pour qui il témoigne ou l'issue du litige. Elle doit être exempte de parti pris, en ce sens qu'elle ne doit pas

position over another. The acid test is whether the expert's opinion would not change regardless of which party retained him or her: P. Michell and R. Mandhane, "The Uncertain Duty of the Expert Witness" (2005), 42 *Alta. L. Rev.* 635, at pp. 638-39. These concepts, of course, must be applied to the realities of adversary litigation. Experts are generally retained, instructed and paid by one of the adversaries. These facts alone do not undermine the expert's independence, impartiality and freedom from bias.

favoriser injustement la position d'une partie au détriment de celle de l'autre. Le critère décisif est que l'opinion de l'expert ne changerait pas, peu importe la partie qui aurait retenu ses services (P. Michell et R. Mandhane, « The Uncertain Duty of the Expert Witness » (2005), 42 *Alta. L. Rev*. 635, p. 638-639). Ces concepts, il va sans dire, doivent être appliqués aux réalités du débat contradictoire. Les experts sont généralement engagés, mandatés et payés par l'un des adversaires. Ces faits, à eux seuls, ne compromettent pas l'indépendance, l'impartialité ni l'absence de parti pris de l'expert.

E. *The Expert's Duties and Admissibility*

E. *Les obligations de l'expert et l'admissibilité de son témoignage*

[33] As we have seen, there is a broad consensus about the nature of an expert's duty to the court. There is no such consensus, however, about how that duty relates to the admissibility of an expert's evidence. There are two main questions: Should the elements of this duty go to admissibility of the evidence rather than simply to its weight?; And, if so, is there a threshold admissibility requirement in relation to independence and impartiality?

[33] Comme nous l'avons vu, il existe un large consensus quant à la nature de l'obligation de l'expert envers le tribunal. Il n'en va toutefois pas de même du rapport entre cette obligation et l'admissibilité du témoignage de l'expert. Deux questions importantes se posent : les éléments de l'obligation de l'expert jouent-ils au regard de l'admissibilité du témoignage plutôt que simplement de la valeur probante de celui-ci et, dans l'affirmative, l'indépendance et l'impartialité constituent-elles un critère d'admissibilité?

[34] In this section, I will explain my view that the answer to both questions is yes: a proposed expert's independence and impartiality go to admissibility and not simply to weight and there is a threshold admissibility requirement in relation to this duty. Once that threshold is met, remaining concerns about the expert's compliance with his or her duty should be considered as part of the overall cost-benefit analysis which the judge conducts to carry out his or her gatekeeping role.

[34] Dans la présente section, j'explique pourquoi je réponds par l'affirmative à ces deux questions : l'indépendance et l'impartialité de l'expert proposé jouent au regard de l'admissibilité de son témoignage plutôt que simplement de la valeur probante de celui-ci, et l'obligation de l'expert constitue un critère d'admissibilité. Une fois qu'il est satisfait à ce critère, toute réserve qui demeure quant à savoir si l'expert s'est conformé à son obligation devrait être examinée dans le cadre de l'analyse coût-bénéfices qu'effectue le juge dans l'exercice de son rôle de gardien.

(1) Admissibility or Only Weight?

(1) Admissibilité ou valeur probante?

(a) *The Canadian Law*

a) *Le droit canadien*

[35] The weight of authority strongly supports the conclusion that at a certain point, expert evidence should be ruled inadmissible due to the expert's lack of impartiality and/or independence.

[35] La jurisprudence dominante appuie solidement la conclusion qu'il convient, à un certain point, de juger inadmissible le témoignage de l'expert qui fait preuve d'un manque d'indépendance ou d'impartialité.

[36] Our Court has confirmed this position in a recent decision that was not available to the courts below:

> It is well established that an expert's opinion must be independent, impartial and objective, and given with a view to providing assistance to the decision maker (J.-C. Royer and S. Lavallée, *La preuve civile* (4th ed. 2008), at No. 468; D. Béchard, with the collaboration of J. Béchard, *L'expert* (2011), chap. 9; *An Act to establish the new Code of Civil Procedure*, S.Q. 2014, c. 1, s. 22 (not yet in force)). However, these factors generally have an impact on the probative value of the expert's opinion and are not always insurmountable barriers to the admissibility of his or her testimony. Nor do they necessarily "disqualify" the expert (L. Ducharme and C.-M. Panaccio, *L'administration de la preuve* (4th ed. 2010), at Nos. 590-91 and 605). For expert testimony to be inadmissible, more than a simple appearance of bias is necessary. The question is not whether a reasonable person would consider that the expert is not independent. Rather, what must be determined is whether the expert's lack of independence renders him or her incapable of giving an impartial opinion in the specific circumstances of the case (D. M. Paciocco, "Unplugging Jukebox Testimony in an Adversarial System: Strategies for Changing the Tune on Partial Experts" (2009), 34 *Queen's L.J.* 565, at pp. 598-99).
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> (*Mouvement laïque québécois v. Saguenay (City)*, 2015 SCC 16, [2015] 2 S.C.R. 3, at para. 106)

[37] I will refer to a number of other cases that support this view. I do so by way of illustration and without commenting on the outcome of particular cases. An expert's interest in the litigation or relationship to the parties has led to exclusion in a number of cases: see, e.g., *Fellowes, McNeil v. Kansa General International Insurance Co.* (1998), 40 O.R. (3d) 456 (Gen. Div.) (proposed expert was the defendant's lawyer in related matters and had investigated from the outset of his retainer the matter of a potential negligence claim against the plaintiff); *Royal Trust Corp. of Canada v. Fisherman* (2000), 49 O.R. (3d) 187 (S.C.J.) (expert was the party's lawyer in related U.S. proceedings); *R. v. Docherty*, 2010 ONSC 3628 (expert was the defence counsel's father); *Ocean v. Economical Mutual Insurance Co.*, 2010 NSSC 315, 293 N.S.R. (2d) 394 (expert was also a party to the litigation); *Handley v. Punnett*,

[36] La Cour vient de confirmer cette position dans un arrêt dont ne disposaient pas les juridictions inférieures :

> Il est acquis que l'expert doit fournir une opinion indépendante, impartiale et objective, en vue d'aider le décideur (J.-C. Royer et S. Lavallée, *La preuve civile* (4e éd. 2008), nº 468; D. Béchard, avec la collaboration de J. Béchard, *L'expert* (2011), chap. 9; *Loi instituant le nouveau Code de procédure civile*, L.Q. 2014, c. 1, art. 22 (non encore en vigueur)). Par contre, ces facteurs influencent généralement la valeur probante de l'opinion de l'expert et ne sont pas toujours des obstacles incontournables à l'admissibilité de son témoignage. Ils ne rendent pas non plus le témoin expert nécessairement « inhabile » (L. Ducharme et C.-M. Panaccio, *L'administration de la preuve* (4e éd. 2010), nos 590-591 et 605). Pour qu'un témoignage d'expert soit inadmissible, il faut plus qu'une simple apparence de partialité. La question n'est pas de savoir si une personne raisonnable considérerait que l'expert n'est pas indépendant. Il faut plutôt déterminer si le manque d'indépendance de l'expert le rend de fait incapable de fournir une opinion impartiale dans les circonstances propres à l'instance (D. M. Paciocco, « Unplugging Jukebox Testimony in an Adversarial System : Strategies for Changing the Tune on Partial Experts » (2009), 34 *Queen's L.J.* 565, p. 598-599).
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> (*Mouvement laïque québécois c. Saguenay (Ville)*, 2015 CSC 16, [2015] 2 R.C.S. 3, par. 106)

[37] Je renvoie à plusieurs autres affaires pour étayer mon opinion. Je procède ainsi pour illustrer mon propos, sans émettre d'avis sur l'issue des affaires en question. Dans certaines, l'intérêt de l'expert dans le procès ou ses liens avec l'une des parties ont mené à l'exclusion (voir, p. ex., *Fellowes, McNeil c. Kansa General International Insurance Co.* (1998), 40 O.R. (3d) 456 (Div. gén.) (l'expert proposé était l'avocat de la défenderesse dans une affaire connexe et, dès le début de son mandat, il avait monté un dossier en vue d'une poursuite pour négligence contre la demanderesse); *Royal Trust Corp. of Canada c. Fisherman* (2000), 49 O.R. (3d) 187 (C.S.J.) (l'expert était l'avocat d'une des parties dans une instance connexe introduite aux États-Unis); *R. c. Docherty*, 2010 ONSC 3628 (l'expert était le père de l'avocat de la défense); *Ocean c. Economical Mutual Insurance Co.*, 2010 NSSC

2003 BCSC 294 (expert was also a party to the litigation); *Bank of Montreal v. Citak*, [2001] O.J. No. 1096 (QL) (S.C.J.) (expert was effectively a "co-venturer" in the case due in part to the fact that 40 percent of his remuneration was contingent upon success at trial: para. 7); *Dean Construction Co. v. M.J. Dixon Construction Ltd.*, 2011 ONSC 4629, 5 C.L.R. (4th) 240 (expert's retainer agreement was inappropriate); *Hutchingame v. Johnstone*, 2006 BCSC 271 (expert stood to incur liability depending on the result of the trial). In other cases, the expert's stance or behaviour as an advocate has justified exclusion: see, e.g., *Alfano v. Piersanti*, 2012 ONCA 297, 291 O.A.C. 62; *Kirby Lowbed Services Ltd. v. Bank of Nova Scotia*, 2003 BCSC 617; *Gould v. Western Coal Corp.*, 2012 ONSC 5184, 7 B.L.R. (5th) 19.

[38] Many other cases have accepted, in principle, that lack of independence or impartiality can lead to exclusion, but have ruled that the expert evidence did not warrant rejection on the particular facts: see, e.g., *United City Properties Ltd. v. Tong*, 2010 BCSC 111; *R. v. INCO Ltd.* (2006), 80 O.R. (3d) 594 (S.C.J.). This was the position of the Court of Appeal in this case: para. 109; see also para. 121.

[39] Some Canadian courts, however, have treated these matters as going exclusively to weight rather than to admissibility. The most often cited cases for this proposition are probably *R. v. Klassen*, 2003 MBQB 253, 179 Man. R. (2d) 115, and *Gallant v. Brake-Patten*, 2012 NLCA 23, 321 Nfld. & P.E.I.R. 77. *Klassen* holds as admissible any expert evidence meeting the criteria from *Mohan*, with bias only becoming a factor as to the weight to be given to the evidence: see also *R. v. Violette*, 2008 BCSC 920. Similarly, the court in *Gallant* determined that a challenge to expert evidence that is based on the expert having a connection to a party or an issue in the case

315, 293 N.S.R. (2d) 394 (l'expert était également partie au litige); *Handley c. Punnett*, 2003 BCSC 294 (l'expert était également partie au litige); *Bank of Montreal c. Citak*, [2001] O.J. No. 1096 (QL) (C.S.J.) (l'expert était effectivement « coentrepreneur » dans cette affaire, notamment en raison du fait que 40 p. 100 de sa rémunération dépendait de l'issue favorable du procès (par. 7)); *Dean Construction Co. c. M.J. Dixon Construction Ltd.*, 2011 ONSC 4629, 5 C.L.R. (4th) 240 (les termes du mandat de l'expert étaient discutables); *Hutchingame c. Johnstone*, 2006 BCSC 271 (la responsabilité de l'expert risquait d'être engagée, selon l'issue du procès)). Dans d'autres affaires, l'attitude ou le comportement de l'expert, qui s'était fait le défenseur d'une partie, a justifié l'exclusion (voir, p. ex., *Alfano c. Piersanti*, 2012 ONCA 297, 291 O.A.C. 62; *Kirby Lowbed Services Ltd. c. Bank of Nova Scotia*, 2003 BCSC 617; *Gould c. Western Coal Corp.*, 2012 ONSC 5184, 7 B.L.R. (5th) 19).

[38] Dans un grand nombre d'autres affaires, les tribunaux, tout en acceptant en principe qu'un manque d'indépendance ou d'impartialité pouvait mener à l'exclusion du témoignage de l'expert, ont néanmoins estimé qu'il n'y avait pas lieu d'écarter ce témoignage eu égard aux faits particuliers de l'espèce (voir, p. ex., *United City Properties Ltd. c. Tong*, 2010 BCSC 111; *R. c. INCO Ltd.* (2006), 80 O.R. (3d) 594 (C.S.J.)). C'est le point de vue qu'a adopté la Cour d'appel dans le cas qui nous occupe (par. 109; voir également par. 121).

[39] Toutefois, certains tribunaux canadiens étaient d'avis que ces questions jouaient exclusivement au regard de la valeur de la preuve, et non au regard de son admissibilité. Les décisions les plus souvent citées à cet égard sont sans doute *R. c. Klassen*, 2003 MBQB 253, 179 Man. R. (2d) 115, et *Gallant c. Brake-Patten*, 2012 NLCA 23, 321 Nfld. & P.E.I.R. 77. Dans la première, le tribunal a déclaré admissible tout témoignage d'expert qui satisfaisait aux critères énoncés dans l'arrêt *Mohan* et précisé que le parti pris n'entrait en jeu que lorsqu'il s'agissait de déterminer la valeur probante du témoignage de l'expert (voir également

or a possible predetermined position on the case cannot take place at the admissibility stage: para. 89.

[40] I conclude that the dominant approach in Canadian common law is to treat independence and impartiality as bearing not just on the weight but also on the admissibility of the evidence. I note that while the shareholders submit that issues regarding expert independence should go only to weight, they rely on cases such as *INCO* that specifically accept that a finding of lack of independence or impartiality can lead to inadmissibility in certain circumstances: R.F., at paras. 52-53.

(b) *Other Jurisdictions*

[41] Outside Canada, the concerns related to independence and impartiality have been addressed in a number of ways. Some are similar to the approach in Canadian law.

[42] For example, summarizing the applicable principles in British law, Nelson J. in *Armchair Passenger Transport Ltd. v. Helical Bar Plc*, [2003] EWHC 367 (Q.B.), underlined that when an expert has an interest or connection with the litigation or a party thereto, exclusion will be warranted if it is determined that the expert is unwilling or unable to carry out his or her primary duty to the court: see also H. M. Malek et al., eds., *Phipson on Evidence* (18th ed. 2013), at pp. 1158-59. The mere fact of an interest or connection will not disqualify, but it nonetheless may do so in light of the nature and extent of the interest or connection in particular circumstances. As Lord Phillips of Worth Matravers, M.R., put it in a leading case, "[i]t is always desirable that an expert should have no actual or apparent interest in the outcome of the proceedings in which he gives evidence, but such disinterest is not automatically a precondition to the admissibility of his evidence": *R. (Factortame Ltd.) v. Secretary of State for Transport*, [2002] EWCA Civ 932, [2003]

R. c. Violette, 2008 BCSC 920). De même, dans la deuxième, la cour a statué que la contestation du témoignage de l'expert fondée sur l'existence d'un rapport entre ce dernier et l'une des parties ou une question en litige ou sur une préconception de sa part ne pouvait être formulée à l'étape de l'admissibilité (par. 89).

[40] Je conclus que selon la conception prédominante en common law canadienne, l'indépendance et l'impartialité ont une incidence non seulement sur la valeur de la preuve, mais aussi sur son admissibilité. Je signale que, même s'ils soutiennent que les questions concernant l'indépendance de l'expert ne devraient jouer qu'au regard de la valeur probante, les actionnaires invoquent des affaires comme *INCO*, dans laquelle le tribunal reconnaît expressément qu'une conclusion quant au manque d'indépendance ou d'impartialité peut entraîner l'inadmissibilité dans certaines circonstances (m.i., par. 52-53).

b) *Ailleurs dans le monde*

[41] À l'extérieur du Canada, les questions d'indépendance et d'impartialité ont été abordées de diverses façons, dont certaines s'apparentent à la démarche canadienne.

[42] Par exemple, résumant les principes applicables en droit britannique, le juge Nelson, dans l'arrêt *Armchair Passenger Transport Ltd. c. Helical Bar Plc*, [2003] EWHC 367 (Q.B.), a souligné que lorsque l'expert a un intérêt dans un litige ou un rapport avec celui-ci ou avec une partie, l'exclusion est justifiée s'il est établi que l'expert ne peut ou ne veut pas s'acquitter de sa principale obligation envers la cour (voir également H. M. Malek et autres, dir., *Phipson on Evidence* (18e éd. 2013), p. 1158-1159). Le simple fait d'avoir un intérêt ou un rapport ne rend pas quelqu'un inhabile à témoigner, sauf dans certaines circonstances, selon la nature et l'importance de l'intérêt ou du rapport. Comme lord Phillips de Worth Matravers, maître des rôles, l'explique dans un arrêt de principe : [TRADUCTION] « Il est toujours souhaitable qu'un expert n'ait aucun intérêt réel ou apparent dans l'issue d'un procès dans lequel il témoigne, mais une telle neutralité n'est pas automatiquement essentielle à l'admissibilité de son témoignage »

Q.B. 381, at para. 70; see also *Gallaher International Ltd. v. Tlais Enterprises Ltd.*, [2007] EWHC 464 (Comm.); *Meat Corp. of Namibia Ltd. v. Dawn Meats (U.K.) Ltd.*, [2011] EWHC 474 (Ch. D.); *Matchbet Ltd. v. Openbet Retail Ltd.*, [2013] EWHC 3067 (Ch. D.), at paras. 312-17.

[43] In Australia, the expert's objectivity and impartiality will generally go to weight, not to admissibility: I. Freckelton and H. Selby, *Expert Evidence: Law, Practice, Procedure and Advocacy* (5th ed. 2013), at p. 35. As the Court of Appeal of the State of Victoria put it: ". . . to the extent that it is desirable that expert witnesses should be under a duty to assist the Court, that has not been held and should not be held as disqualifying, in itself, an 'interested' witness from being competent to give expert evidence" (*FGT Custodians Pty. Ltd. v. Fagenblat*, [2003] VSCA 33, at para. 26 (AustLII); see also Freckelton and Selby, at pp. 186-88; *Collins Thomson v. Clayton*, [2002] NSWSC 366; *Kirch Communications Pty Ltd. v. Gene Engineering Pty Ltd.*, [2002] NSWSC 485; *SmithKline Beecham (Australia) Pty Ltd. v. Chipman*, [2003] FCA 796, 131 F.C.R. 500).

[44] In the United States, at the federal level, the independence of the expert is a consideration that goes to the weight of the evidence, and a party may testify as an expert in his own case: *Rodriguez v. Pacificare of Texas, Inc.*, 980 F.2d 1014 (5th Cir. 1993), at p. 1019; *Tagatz v. Marquette University*, 861 F.2d 1040 (7th Cir. 1988); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014), at p. 1321. This also seems to be a fair characterization of the situation in the states (*Corpus Juris Secundum*, vol. 32 (2008), at p. 325: "The bias or interest of the witness does not affect his or her qualification, but only the weight to be given the testimony.").

(c) *Conclusion*

[45] Following what I take to be the dominant view in the Canadian cases, I would hold that an expert's lack of independence and impartiality goes to the admissibility of the evidence in addition to being considered in relation to the weight to be given to

(*R. (Factortame Ltd.) c. Secretary of State for Transport*, [2002] EWCA Civ 932, [2003] Q.B. 381, par. 70; voir également *Gallaher International Ltd. c. Tlais Enterprises Ltd.*, [2007] EWHC 464 (Comm.); *Meat Corp. of Namibia Ltd. c. Dawn Meats (U.K.) Ltd.*, [2011] EWHC 474 (Ch. D.); *Matchbet Ltd. c. Openbet Retail Ltd.*, [2013] EWHC 3067 (Ch. D.), par. 312-317).

[43] En Australie, l'objectivité et l'impartialité de l'expert jouent généralement au regard de la valeur de la preuve, et non de son admissibilité (I. Freckelton et H. Selby, *Expert Evidence : Law, Practice, Procedure and Advocacy* (5e éd. 2013), p. 35). Pour reprendre les propos de la Cour d'appel de l'État de Victoria : [TRADUCTION] « . . . dans la mesure où il est souhaitable que les témoins experts aient l'obligation d'aider le tribunal, on ne devrait pas juger inhabile à témoigner un expert du seul fait qu'il est "intéressé" » (*FGT Custodians Pty. Ltd. c. Fagenblat*, [2003] VSCA 33, par. 26 (AustLII); voir également Freckelton et Selby, p. 186-188; *Collins Thomson c. Clayton*, [2002] NSWSC 366; *Kirch Communications Pty Ltd. c. Gene Engineering Pty Ltd.*, [2002] NSWSC 485; *SmithKline Beecham (Australia) Pty Ltd. c. Chipman*, [2003] FCA 796, 131 F.C.R. 500).

[44] Aux États-Unis, au niveau fédéral, l'indépendance de l'expert joue au regard de la valeur de la preuve, et une partie peut témoigner à son propre procès à titre d'expert (*Rodriguez c. Pacificare of Texas, Inc.*, 980 F.2d 1014 (5th Cir. 1993), p. 1019; *Tagatz c. Marquette University*, 861 F.2d 1040 (7th Cir. 1988); *Apple Inc. c. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014), p. 1321). Il semble que la situation soit à peu près la même à l'échelle des États (*Corpus Juris Secundum*, vol. 32 (2008), p. 325 : [TRADUCTION] « Le parti pris ou l'intérêt du témoin n'influe pas sur son habilité à témoigner, mais seulement sur la valeur probante de son témoignage. »).

c) *Conclusion*

[45] Conformément à ce qui me semble le courant prédominant dans la jurisprudence canadienne, je suis d'avis que le manque d'indépendance et d'impartialité d'un expert joue au regard tant de l'admissibilité de son témoignage que de la valeur du

the evidence if admitted. That approach seems to me to be more in line with the basic structure of our law relating to expert evidence and with the importance our jurisprudence has attached to the gatekeeping role of trial judges. Binnie J. summed up the Canadian approach well in *J.-L.J.*: "The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all of the frailties could go at the end of the day to weight rather than admissibility" (para. 28).

(2) The Appropriate Threshold

[46] I have already described the duty owed by an expert witness to the court: the expert must be fair, objective and non-partisan. As I see it, the appropriate threshold for admissibility flows from this duty. I agree with Prof. (now Justice of the Ontario Court of Justice) Paciocco that "the common law has come to accept . . . that expert witnesses have a duty to assist the court that overrides their obligation to the party calling them. If a witness is unable or unwilling to fulfill that duty, they do not qualify to perform the role of an expert and should be excluded": "Taking a 'Goudge' out of Bluster and Blarney: an 'Evidence-Based Approach' to Expert Testimony" (2009), 13 *Can. Crim. L.R.* 135, at p. 152 (footnote omitted). The expert witnesses must, therefore, be aware of this primary duty to the court and able and willing to carry it out.

[47] Imposing this additional threshold requirement is not intended to and should not result in trials becoming longer or more complex. As Prof. Paciocco aptly observed, "if inquiries about bias or partiality become routine during *Mohan voir dires*, trial testimony will become nothing more than an inefficient reprise of the admissibility hearing": "Unplugging Jukebox Testimony in an Adversarial System: Strategies for Changing the Tune on Partial Experts" (2009), 34 *Queen's L.J.* 565 ("Jukebox"), at p. 597. While I would not go so far as to hold that the expert's independence and impartiality should be presumed absent challenge, my

témoignage, s'il est admis. Cette façon de voir semble s'accorder davantage avec l'économie générale de notre droit en ce qui concerne les témoignages d'experts et l'importance que notre jurisprudence accorde au rôle de gardien exercé par les juges de première instance. Le juge Binnie cerne bien l'optique canadienne dans l'arrêt *J.-L.J.* : « La question de l'admissibilité d'une preuve d'expert devrait être examinée minutieusement au moment où elle est soulevée, et cette preuve ne devrait pas être admise trop facilement pour le motif que toutes ses faiblesses peuvent en fin de compte avoir une incidence sur son poids plutôt que sur son admissibilité » (par. 28).

(2) Teneur du critère

[46] J'ai déjà exposé l'obligation du témoin expert envers le tribunal : il doit être juste, objectif et impartial. Selon moi, le critère d'admissibilité découle de cette obligation. Je suis d'accord avec le professeur Paciocco (maintenant juge de la Cour de justice de l'Ontario), selon qui [TRADUCTION] « la common law en est venue à concevoir [. . .] que les témoins experts ont l'obligation d'aider le tribunal, qui l'emporte sur celle qu'ils doivent à la partie qui les cite. Le témoin qui ne peut ou ne veut s'acquitter de cette obligation n'est pas habile à exercer son rôle d'expert et devrait être exclu » (« Taking a "Goudge" out of Bluster and Blarney : an "Evidence-Based Approach" to Expert Testimony » (2009), 13 *Rev. can. D.P.* 135, p. 152 (note de bas de page omise)). Par conséquent, les témoins experts doivent être conscients de leur obligation principale envers le tribunal et pouvoir et vouloir s'en acquitter.

[47] L'idée, en imposant ce critère supplémentaire, n'est pas de prolonger ni de complexifier les procès et il ne devrait pas en résulter un tel effet. Comme le souligne le professeur Paciocco, à raison : [TRADUCTION] « . . . si les débats sur la partialité deviennent chose courante pendant un voir-dire de type *Mohan*, le témoignage qui sera donné au procès ne sera plus qu'une répétition inefficace de l'audience sur l'admissibilité » (« Unplugging Jukebox Testimony in an Adversarial System : Strategies for Changing the Tune on Partial Experts » (2009), 34 *Queen's L.J.* 565 (« Jukebox »), p. 597). Sans aller jusqu'à affirmer qu'il faut présumer l'indépendance

view is that absent such challenge, the expert's attestation or testimony recognizing and accepting the duty will generally be sufficient to establish that this threshold is met.

[48] Once the expert attests or testifies on oath to this effect, the burden is on the party opposing the admission of the evidence to show that there is a realistic concern that the expert's evidence should not be received because the expert is unable and/or unwilling to comply with that duty. If the opponent does so, the burden to establish on a balance of probabilities this aspect of the admissibility threshold remains on the party proposing to call the evidence. If this is not done, the evidence, or those parts of it that are tainted by a lack of independence or impartiality, should be excluded. This approach conforms to the general rule under the *Mohan* framework, and elsewhere in the law of evidence, that the proponent of the evidence has the burden of establishing its admissibility.

[49] This threshold requirement is not particularly onerous and it will likely be quite rare that a proposed expert's evidence would be ruled inadmissible for failing to meet it. The trial judge must determine, having regard to both the particular circumstances of the proposed expert and the substance of the proposed evidence, whether the expert is able and willing to carry out his or her primary duty to the court. For example, it is the nature and extent of the interest or connection with the litigation or a party thereto which matters, not the mere fact of the interest or connection; the existence of some interest or a relationship does not automatically render the evidence of the proposed expert inadmissible. In most cases, a mere employment relationship with the party calling the evidence will be insufficient to do so. On the other hand, a direct financial interest in the outcome of the litigation will be of more concern. The same can be said in the case of a very close familial relationship with one of the parties or situations in which the proposed expert will probably incur professional liability if his or her opinion is not accepted by the court. Similarly, an expert who, in his or her proposed evidence or otherwise,

et l'impartialité de l'expert si elles ne sont pas contestées, je pense qu'en l'absence d'une telle contestation, il est généralement satisfait au critère dès lors que l'expert, dans son attestation ou sa déposition, reconnaît son obligation et l'accepte.

[48] Une fois que l'expert a produit cette attestation ou a déposé sous serment en ce sens, il incombe à la partie qui s'oppose à l'admission du témoignage de démontrer un motif réaliste de le juger inadmissible au motif que l'expert ne peut ou ne veut s'acquitter de son obligation. Si elle réussit, la charge de démontrer, selon la prépondérance des probabilités, qu'il a été satisfait à ce critère d'admissibilité incombe toujours à la partie qui entend présenter le témoignage. Si elle n'y parvient pas, le témoignage, ou les parties de celui-ci qui sont viciées par un manque d'indépendance ou d'impartialité, devrait être exclu. Cette démarche est conforme à la règle générale du cadre établi dans l'arrêt *Mohan*, et généralement en droit de la preuve, selon laquelle il revient à la partie qui produit la preuve d'en établir l'admissibilité.

[49] Ce critère n'est pas particulièrement exigeant, et il sera probablement très rare que le témoignage de l'expert proposé soit jugé inadmissible au motif qu'il ne satisfait pas au critère. Le juge de première instance doit déterminer, compte tenu tant de la situation particulière de l'expert que de la teneur du témoignage proposé, si l'expert peut ou veut s'acquitter de sa principale obligation envers le tribunal. Par exemple, c'est la nature et le degré de l'intérêt ou des rapports qu'a l'expert avec l'instance ou une partie qui importent, et non leur simple existence : un intérêt ou un rapport quelconque ne rend pas d'emblée la preuve de l'expert proposé inadmissible. Dans la plupart des cas, l'existence d'une simple relation d'emploi entre l'expert et la partie qui le cite n'emporte pas l'inadmissibilité de la preuve. En revanche, un intérêt financier direct dans l'issue du litige suscite des préoccupations. Il en va ainsi des liens familiaux étroits avec une partie et des situations où l'expert proposé s'expose à une responsabilité professionnelle si le tribunal ne retient pas son opinion. De même, l'expert qui, dans sa déposition ou d'une autre manière, se fait le défenseur d'une partie ne peut ou ne veut manifestement pas s'acquitter de

assumes the role of an advocate for a party is clearly unwilling and/or unable to carry out the primary duty to the court. I emphasize that exclusion at the threshold stage of the analysis should occur only in very clear cases in which the proposed expert is unable or unwilling to provide the court with fair, objective and non-partisan evidence. Anything less than clear unwillingness or inability to do so should not lead to exclusion, but be taken into account in the overall weighing of costs and benefits of receiving the evidence.

[50] As discussed in the English case law, the decision as to whether an expert should be permitted to give evidence despite having an interest or connection with the litigation is a matter of fact and degree. The concept of apparent bias is not relevant to the question of whether or not an expert witness will be unable or unwilling to fulfill its primary duty to the court. When looking at an expert's interest or relationship with a party, the question is not whether a reasonable observer would think that the expert is not independent. The question is whether the relationship or interest results in the expert being unable or unwilling to carry out his or her primary duty to the court to provide fair, non-partisan and objective assistance.

[51] Having established the analytical framework, described the expert's duty and determined that compliance with this duty goes to admissibility and not simply to weight, I turn now to where this duty fits into the analytical framework for admission of expert opinion evidence.

F. *Situating the Analysis in the Mohan Framework*

(1) The Threshold Inquiry

[52] Courts have addressed independence and impartiality at various points of the admissibility test. Almost every branch of the *Mohan* framework has been adapted to incorporate bias concerns one

sa principale obligation envers le tribunal. Je tiens à souligner que la décision d'exclure le témoignage à la première étape de l'analyse pour non-conformité aux critères d'admissibilité ne devrait être prise que dans les cas manifestes où l'expert proposé ne peut ou ne veut fournir une preuve juste, objective et impartiale. Dans les autres cas, le témoignage ne devrait pas être exclu d'office, et son admissibilité sera déterminée à l'issue d'une pondération globale du coût et des bénéfices de son admission.

[50] Comme nous l'avons vu en examinant la jurisprudence anglaise, la décision de permettre ou non à un expert de témoigner malgré son intérêt dans un litige ou son rapport avec celui-ci dépend de leur importance et des faits. La notion d'apparence de parti pris n'est pas pertinente lorsqu'il s'agit de déterminer si le témoin expert pourra ou voudra s'acquitter de sa principale obligation envers le tribunal. Lorsque l'on se penche sur l'intérêt d'un expert ou sur ses rapports avec une partie, il ne s'agit pas de se demander si un observateur raisonnable penserait que l'expert est indépendant ou non; il s'agit plutôt de déterminer si la relation de l'expert avec une partie ou son intérêt fait en sorte qu'il ne peut ou ne veut s'acquitter de sa principale obligation envers le tribunal, en l'occurrence apporter au tribunal une aide juste, objective et impartiale.

[51] Nous avons posé le cadre analytique, défini l'obligation de l'expert et établi que le respect de cette dernière joue au regard de l'admissibilité, et non simplement de la valeur probante. Voyons ensuite où cette obligation s'inscrit dans le cadre analytique régissant l'admissibilité du témoignage d'opinion d'un expert.

F. *L'analyse au sein du cadre établi par l'arrêt Mohan*

(1) L'analyse fondée sur les critères d'admissibilité

[52] Les tribunaux ont abordé la question de l'indépendance et de l'impartialité à divers stades de l'examen des critères d'admissibilité. Presque tous les volets du cadre établi par l'arrêt *Mohan* ont servi

way or another: the proper qualifications component (see, e.g., *Bank of Montreal*; *Dean Construction*; *Agribrands Purina Canada Inc. v. Kasamekas*, 2010 ONSC 166; *R. v. Demetrius*, 2009 CanLII 22797 (Ont. S.C.J.)); the necessity component (see, e.g., *Docherty*; *Alfano*); and during the discretionary cost-benefit analysis (see, e.g., *United City Properties*; *Abbey* (ONCA)). On other occasions, courts have found it to be a stand-alone requirement: see, e.g., *Docherty*; *International Hi-Tech Industries Inc. v. FANUC Robotics Canada Ltd.*, 2006 BCSC 2011; *Casurina Ltd. Partnership v. Rio Algom Ltd.* (2002), 28 B.L.R. (3d) 44 (Ont. S.C.J.); *Prairie Well Servicing Ltd. v. Tundra Oil and Gas Ltd.*, 2000 MBQB 52, 146 Man. R. (2d) 284. Some clarification of this point will therefore be useful.

[53] In my opinion, concerns related to the expert's duty to the court and his or her willingness and capacity to comply with it are best addressed initially in the "qualified expert" element of the *Mohan* framework: S. C. Hill, D. M. Tanovich and L. P. Strezos, *McWilliams' Canadian Criminal Evidence* (5th ed. (loose-leaf)), at 12:30.20.50; see also *Deemar v. College of Veterinarians of Ontario*, 2008 ONCA 600, 92 O.R. (3d) 97, at para. 21; Lederman, Bryant and Fuerst, at pp. 826-27; *Halsbury's Laws of Canada: Evidence*, at para. HEV-152 "Partiality"; *The Canadian Encyclopedic Digest* (Ont. 4th ed. (loose-leaf)), vol. 24, Title 62 — Evidence, at §469. A proposed expert witness who is unable or unwilling to fulfill this duty to the court is not properly qualified to perform the role of an expert. Situating this concern in the "properly qualified expert" ensures that the courts will focus expressly on the important risks associated with biased experts: Hill, Tanovich and Strezos, at 12:30.20.50; Paciocco, "Jukebox", at p. 595.

(2) The Gatekeeping Exclusionary Discretion

[54] Finding that expert evidence meets the basic threshold does not end the inquiry. Consistent with the structure of the analysis developed following *Mohan* which I have discussed earlier, the judge

à l'examen des préoccupations relatives au parti pris : la qualification requise (voir, p. ex., *Bank of Montreal*; *Dean Construction*; *Agribrands Purina Canada Inc. c. Kasamekas*, 2010 ONSC 166; *R. c. Demetrius*, 2009 CanLII 22797 (C.S.J. Ont.)); la nécessité (voir, p. ex., *Docherty*; *Alfano*); et l'analyse coût-bénéfices, qui appelle l'exercice d'un pouvoir discrétionnaire (voir, p. ex., *United City Properties*; *Abbey* (ONCA)). À d'autres occasions, les tribunaux en ont fait un critère distinct (voir, p. ex., *Docherty*; *International Hi-Tech Industries Inc. c. FANUC Robotics Canada Ltd.*, 2006 BCSC 2011; *Casurina Ltd. Partnership c. Rio Algom Ltd.* (2002), 28 B.L.R. (3d) 44 (C.S.J. Ont.); *Prairie Well Servicing Ltd. c. Tundra Oil and Gas Ltd.*, 2000 MBQB 52, 146 Man. R. (2d) 284). Des précisions s'imposent donc.

[53] À mon avis, c'est sous le volet « qualification suffisante de l'expert » du cadre établi par l'arrêt *Mohan* qu'il convient d'abord d'examiner les préoccupations concernant l'obligation de l'expert envers le tribunal et s'il peut ou veut s'en acquitter (S. C. Hill, D. M. Tanovich et L. P. Strezos, *McWilliams' Canadian Criminal Evidence* (5e éd. (feuilles mobiles)), 12:30.20.50; voir également *Deemar c. College of Veterinarians of Ontario*, 2008 ONCA 600, 92 O.R. (3d) 97, par. 21; Lederman, Bryant et Fuerst, p. 826-827; *Halsbury's Laws of Canada : Evidence*, par. HEV-152 « Partiality »; *The Canadian Encyclopedic Digest* (Ont. 4e éd. (feuilles mobiles)), vol. 24, titre 62 — Evidence, §469). Le témoin expert proposé qui ne peut ou ne veut s'acquitter de cette obligation envers le tribunal ne possède pas la qualification suffisante pour exercer ce rôle. En abordant cette préoccupation sous le volet de la « qualification suffisante de l'expert », les tribunaux pourront s'attacher à évaluer les risques importants que présentent les experts qui ont un parti pris (Hill, Tanovich et Strezos, 12:30.20.50; Paciocco, « Jukebox », p. 595).

(2) Le pouvoir discrétionnaire du juge en tant que « gardien »

[54] La constatation que le témoignage de l'expert satisfait aux critères ne met pas fin à l'analyse. Conformément au cadre établi dans la foulée de l'arrêt *Mohan* dont nous avons discuté précédemment,

must still take concerns about the expert's independence and impartiality into account in weighing the evidence at the gatekeeping stage. At this point, relevance, necessity, reliability and absence of bias can helpfully be seen as part of a sliding scale where a basic level must first be achieved in order to meet the admissibility threshold and thereafter continue to play a role in weighing the overall competing considerations in admitting the evidence. At the end of the day, the judge must be satisfied that the potential helpfulness of the evidence is not outweighed by the risk of the dangers materializing that are associated with expert evidence.

le juge doit encore tenir compte des réserves émises quant à l'indépendance et à l'impartialité de l'expert lorsqu'il évalue la preuve à l'étape où il exerce son rôle de gardien. Il peut être utile de concevoir la pertinence, la nécessité, la fiabilité et l'absence de parti pris comme autant d'éléments d'un examen en deux temps, qui entrent en ligne de compte à la première étape, celle qui sert à déterminer s'il est satisfait aux critères d'admissibilité, et jouent également un rôle à la deuxième, dans la pondération des considérations concurrentes globales relatives à l'admissibilité. Au bout du compte, le juge doit être convaincu que les risques liés au témoignage de l'expert ne l'emportent pas sur l'utilité possible de celui-ci.

G. *Expert Evidence and Summary Judgment*

[55] I must say a brief word about the procedural context in which this case originates — a summary judgment motion. (I note that these comments relate to the summary judgment regime under the Nova Scotia rules and that different considerations may arise under different rules.) It is common ground that the court hearing the motion can consider only admissible evidence. However, under the Nova Scotia jurisprudence, which is not questioned on this appeal, it is not the role of a judge hearing a summary judgment motion in Nova Scotia to weigh the evidence, draw reasonable inferences from evidence or settle matters of credibility: *Coady v. Burton Canada Co.*, 2013 NSCA 95, 333 N.S.R. (2d) 348, at paras. 42-44, 87 and 98; *Fougere v. Blunden Construction Ltd.*, 2014 NSCA 52, 345 N.S.R. (2d) 385, at paras. 6 and 12. Taking these two principles together, the result in my view is this. A motions judge hearing a summary judgment application under the Nova Scotia rules must be satisfied that proposed expert evidence meets the threshold requirements for admissibility at the first step of the analysis, but should generally not engage in the second step cost-benefit analysis. That cost-benefit analysis, in anything other than the most obvious cases of inadmissibility, inevitably involves assigning weight — or at least potential weight — to the evidence.

G. *Témoignage d'expert et jugement sommaire*

[55] Je me dois de glisser quelques mots sur le contexte procédural dans lequel s'inscrit le présent pourvoi, en l'occurrence celui d'une requête en jugement sommaire. (Mes commentaires concernent le régime des jugements sommaires établi par les règles de la Nouvelle-Écosse. Je reconnais que d'autres considérations sont susceptibles de jouer dans un autre régime.) Il est bien reconnu que le tribunal saisi de la requête ne peut examiner que la preuve admissible. Cependant, suivant la jurisprudence néo-écossaise, qui n'est pas remise en question dans le présent pourvoi, il n'appartient pas au juge saisi d'une requête en jugement sommaire, en Nouvelle-Écosse, de soupeser la preuve, de tirer des inférences raisonnables de celle-ci ou de trancher des questions de crédibilité (*Coady c. Burton Canada Co.*, 2013 NSCA 95, 333 N.S.R. (2d) 348, par. 42-44, 87 et 98; *Fougere c. Blunden Construction Ltd.*, 2014 NSCA 52, 345 N.S.R. (2d) 385, par. 6 et 12). Si l'on considère ces deux principes ensemble, le résultat est à mon avis le suivant. Le juge saisi d'une requête en jugement sommaire en vertu des règles de procédure de la Nouvelle-Écosse doit être convaincu que le témoignage de l'expert proposé satisfait aux critères d'admissibilité à la première étape de l'analyse; en règle générale, il doit toutefois se garder de passer à la seconde étape, celle de l'analyse coût-bénéfices. Cette analyse, sauf dans les cas d'inadmissibilité les plus manifestes, appelle inévitablement l'attribution d'une valeur — ou, à tout le moins, d'une valeur possible — à la preuve.

H. *Application*

[56] I turn to the application of these principles to the facts of the case. In my respectful view, the record amply sustains the result reached by the majority of the Court of Appeal that Ms. MacMillan's evidence was admissible on the summary judgment application. Of course, the framework which I have set out in these reasons was not available to either the motions judge or to the Court of Appeal.

[57] There was no finding by the motions judge that Ms. MacMillan was in fact biased or not impartial or that she was acting as an advocate for the shareholders: C.A. reasons, at para. 122. On the contrary, she specifically recognized that she was aware of the standards and requirements that experts be independent. She was aware of the precise guidelines in the accounting industry concerning accountants acting as expert witnesses. She testified that she owed an ultimate duty to the court in testifying as an expert witness: A.R., vol. III, at pp. 75-76; C.A. reasons, at para. 134. To the extent that the motions judge was concerned about the "appearance" of impartiality, this factor plays no part in the test for admissibility, as I have explained earlier.

[58] The auditors' claim that Ms. MacMillan lacks objectivity rests on two main points which I will address in turn.

[59] First, the auditors say that the earlier work done for the shareholders by the Kentville office of Grant Thornton "served as a catalyst and foundation for the claim of negligence" against the auditors and that this "precluded [Grant Thornton] from acting as 'independent' experts in this case": A.F., at paras. 17 and 19. Ms. MacMillan, the auditors submit, was in an "irreconcilable conflict of interest, in that she would inevitably have to opine on, and choose between, the actions taken and standard of care exercised by her own partners at Grant Thornton" and those of the auditors: A.F., at para. 21. This first submission, however, must be rejected.

H. *Application*

[56] J'aborde maintenant l'application de ces principes aux faits de l'espèce. À mon humble avis, le dossier appuie largement la conclusion à laquelle est parvenue la majorité de la Cour d'appel que le témoignage de M^me^ MacMillan était admissible pour l'instruction de la requête en jugement sommaire. Bien sûr, ni le juge des requêtes ni la Cour d'appel ne disposaient du cadre que j'établis dans les présents motifs.

[57] Le juge des requêtes n'a pas conclu que M^me^ MacMillan avait un parti pris, qu'elle n'était pas impartiale ou qu'elle se faisait le défenseur des actionnaires (motifs de la C.A., par. 122). Au contraire, M^me^ MacMillan a reconnu expressément connaître les normes et exigences voulant que l'expert soit indépendant. Elle était également au fait des directives précises dans le milieu de la comptabilité applicables aux comptables cités comme témoins experts. Elle était consciente à titre de témoin expert de sa principale obligation envers le tribunal (d.a., vol. III, p. 75-76; motifs de la C.A., par. 134). Même si, selon le juge des requêtes, il faut une « apparence » d'impartialité, ce facteur ne constitue pas un critère d'admissibilité, comme je l'explique précédemment.

[58] La prétention des vérificateurs selon laquelle M^me^ MacMillan manquerait d'objectivité repose sur deux principaux points que j'aborde successivement.

[59] D'abord, les vérificateurs soutiennent que le travail fait antérieurement à l'intention des actionnaires par le bureau de Grant Thornton à Kentville [TRADUCTION] « a servi de catalyseur et de fondement à l'action pour négligence » intentée contre les vérificateurs et que cela « empêche [Grant Thornton] d'agir comme expert "indépendant" en l'espèce » (m.a., par. 17 et 19). Selon les vérificateurs, M^me^ MacMillan se trouvait dans « une situation de conflit d'intérêts irréductible qui la forçait inévitablement à commenter et approuver les mesures prises et la norme de diligence observée soit par ses propres partenaires chez Grant Thornton » soit par les vérificateurs (m.a., par. 21). Ce premier argument doit cependant être rejeté.

[60] The fact that one professional firm discovers what it thinks is or may be professional negligence does not, on its own, disqualify it from offering that opinion as an expert witness. Provided that the initial work is done independently and impartially and the person put forward as an expert understands and is able to comply with the duty to provide fair, objective and non-partisan assistance to the court, the expert meets the threshold qualification in that regard. There is no suggestion here that Grant Thornton was hired to take a position dictated to it by the shareholders or that there was anything more than a speculative possibility of Grant Thornton incurring liability to them if the firm's opinion was not ultimately accepted by the court. There was no finding that Ms. MacMillan was, in fact, biased or not impartial, or that she was acting as an advocate for the shareholders. The auditors' submission that she somehow "admitted" on her cross-examination that she was in an "irreconcilable conflict" is not borne out by a fair reading of her evidence in context: A.R., vol. III, at pp. 139-45. On the contrary, her evidence was clear that she understood her role as an expert and her duty to the court: *ibid.*, at pp. 75-76.

[61] The auditors' second main point was that Ms. MacMillan was not independent because she had "incorporated" some of the work done by the Kentville office of her firm. This contention is also ill founded. To begin, I do not accept that an expert lacks the threshold qualification in relation to the duty to give fair, objective and non-partisan evidence simply because the expert relies on the work of other professionals in reaching his or her own opinion. Moreover, as Beveridge J.A. concluded, what was "incorporated" was essentially an exercise in arithmetic that had nothing to do with any accounting opinion expressed by the Kentville office: C.A. reasons, at paras. 146-49.

[62] There was no basis disclosed in this record to find that Ms. MacMillan's evidence should be

[60] Le cabinet professionnel qui découvre ce qu'il estime être une négligence professionnelle ou ce qui pourrait l'être n'est pas d'emblée interdit de donner son opinion en tant que témoin expert. Dès lors que le travail initial est fait de façon indépendante et impartiale et que l'expert proposé comprend son obligation d'apporter au tribunal une aide juste, objective et impartiale et qu'il peut s'acquitter de cette obligation, il est satisfait au critère relatif à la qualification sur ce plan. Or, rien ne permet de penser ici que le cabinet Grant Thornton a été engagé pour exprimer un point de vue dicté par les actionnaires, ni qu'il y ait eu plus qu'une hypothétique possibilité que le cabinet soit tenu responsable envers ces derniers si, en fin de compte, le tribunal n'avait pas retenu son opinion. Le juge n'a pas conclu que M[me] MacMillan avait un parti pris, qu'elle a manqué d'impartialité ou qu'elle s'était faite le défenseur des actionnaires. De plus, l'argument des vérificateurs selon lequel M[me] MacMillan a en quelque sorte « admis » en contre-interrogatoire se trouver dans une situation de « conflit d'intérêts irréductible » n'est pas corroboré par une interprétation raisonnable de son témoignage dans son contexte (d.a., vol. III, p. 139-145). Au contraire, il ressort clairement de son témoignage qu'elle comprenait son rôle d'expert et son obligation envers le tribunal (*ibid.*, p. 75-76).

[61] Deuxièmement, M[me] MacMillan ne serait pas indépendante, puisqu'elle avait « incorporé » une partie du travail fait par son cabinet au bureau de Kentville. Cette prétention est également non fondée. D'abord, je n'accepte pas qu'un expert ne satisfasse pas au critère de la qualification suffisante, dans la mesure où il est question de son obligation de rendre un témoignage juste, objectif et impartial, simplement parce qu'il se fonde sur le travail d'autres professionnels pour se faire une opinion. De plus, comme le juge Beveridge l'a conclu, ce qui a été « incorporé » consistait essentiellement en un exercice arithmétique qui n'avait rien à voir avec quelque opinion comptable qu'aurait exprimée le bureau de Kentville (motifs de la C.A., par. 146-149).

[62] Le présent dossier ne révèle aucun élément qui permette de conclure que le témoignage de

excluded because she was not able and willing to provide the court with fair, objective and non-partisan evidence. I agree with the majority of the Court of Appeal who concluded that the motions judge committed a palpable and overriding error in determining that Ms. MacMillan was in a conflict of interest that prevented her from giving impartial and objective evidence: paras. 136-50.

IV. Disposition

[63] I would dismiss the appeal with costs.

Appeal dismissed with costs.

Solicitors for the appellants: Stikeman Elliott, Toronto.

Solicitors for the respondents: Lenczner Slaght Royce Smith Griffin, Toronto; Groupe Murphy Group, Moncton.

Solicitor for the intervener the Attorney General of Canada: Attorney General of Canada, Toronto.

Solicitors for the intervener the Criminal Lawyers' Association (Ontario): Henein Hutchison, Toronto.

M[me] MacMillan devrait être exclu parce que celle-ci ne pouvait ou ne voulait rendre devant le tribunal un témoignage juste, objectif et impartial. Je conviens avec la majorité de la Cour d'appel que le juge des requêtes a commis une erreur manifeste et dominante en estimant que M[me] MacMillan était dans une situation de conflit d'intérêts qui l'empêchait de rendre un témoignage objectif et impartial (par. 136-150).

IV. Dispositif

[63] Je suis d'avis de rejeter le pourvoi avec dépens.

Pourvoi rejeté avec dépens.

Procureurs des appelants : Stikeman Elliott, Toronto.

Procureurs des intimées : Lenczner Slaght Royce Smith Griffin, Toronto; Groupe Murphy Group, Moncton.

Procureur de l'intervenant le procureur général du Canada : Procureur général du Canada, Toronto.

Procureurs de l'intervenante Criminal Lawyers' Association (Ontario) : Henein Hutchison, Toronto.

Bruff-Murphy et al. v. Gunawardena
[Indexed as: Bruff-Murphy v. Gunawardena]

Ontario Reports

Court of Appeal for Ontario,

Lauwers, Hourigan and Benotto JJ.A.

June 16, 2017

138 O.R. (3d) 584 | 2017 ONCA 502

Case Summary

Evidence — Expert evidence — Trial judge erring in qualifying defence psychiatrist as expert in personal injury action despite having serious reservations about witness' methodology and independence — Trial judge failing to conduct cost-benefit analysis with respect to witness' evidence as he erroneously believed that he was obliged to qualify witness as expert if witness met Mohan threshold — Trial judge also erring in failing to exclude witness' evidence or to alert jury to problems with witness' testimony after witness clearly became partisan advocate for defence — Trial judge's gatekeeping role not ending when he qualified witness as expert — Admission of witness' testimony resulting in miscarriage of justice.

The plaintiff claimed to have suffered soft tissue damages when her vehicle was rear-ended by the defendant's vehicle. She also alleged that the accident had left her with a chronic pain condition with attendant anxiety and depression. One [page585] of the two expert witnesses called by the defence was B, a psychiatrist who conducted an independent medical examination of the plaintiff. Despite having serious reservations about B's methodology and independence, the trial judge qualified him as an expert. When B testified, it became apparent that he had crossed the line and become a partisan advocate for the defendant. His report and his testimony essentially amounted to an attack on the plaintiff's credibility. In keeping with his usual methodology, he had examined the plaintiff before reviewing her medical records, and had then gone through the medical records looking for discrepancies between what she told him and what was in the records. Those discrepancies formed the largest portion of his report. The trial judge did nothing to exclude B's opinion evidence or alert the jury to the problems with his testimony. The jury assessed general damages at $23,500 and rejected all other heads of damages. The plaintiff appealed.

Held, the appeal should be allowed.

The trial judge did not err in ruling that B could not be cross-examined regarding prior court and arbitral findings made against him.

The trial judge failed to properly discharge his gatekeeper duty at the qualification stage. He did not perform a cost-benefit analysis with respect to B's evidence because of his apparent

erroneous belief that he was obliged to qualify B as an expert if B met the *Mohan* threshold. Had he done so, he would have concluded that the risks of permitting B to testify far outweighed any potential benefit from the proposed testimony. It was evident from a review of B's report that there was a high probability that he would prove to be a troublesome expert witness who was intent on advocating for the defence and unwilling to properly fulfill his duties to the court.

It became obvious during B's testimony that he understood his primary role to be to expose inconsistencies and not to provide a truly independent assessment of the plaintiff's psychiatric condition. Where, as here, an expert's eventual testimony removes any doubt about his independence, the trial judge must not act as if he were *functus*, but must continue to exercise his gatekeeper function. The court has residual discretion to exclude expert evidence even after admitting it, if later in the trial prejudice emerges that was not apparent at the time of admission. In this case, the trial judge could have advised counsel that he was going to give either a mid-trial or final instruction that B's testimony would be excluded in whole or in part, received submissions from counsel in the absence of the jury, and proceeded as he saw fit. Alternatively, he could have asked for submissions from counsel on a mistrial and ruled accordingly. The admission of B's testimony resulted in a miscarriage of justice.

White Burgess Langille Inman v. Abbott and Haliburton Co., [2015] 2 S.C.R. 182, [2015] S.C.J. No. 23, 2015 SCC 23, 18 C.R. (7th) 308, 470 N.R. 324, 383 D.L.R. (4th) 429, 67 C.P.C. (7th) 73, 360 N.S.R. (2d) 1, 2015EXP-1385, J.E. 2015-767, EYB 2015-251384, 251 A.C.W.S. (3d) 610, **consd**

Other cases referred to

Brisco Estate v. Canadian Premiere Life Insurance Co. (2012), 113 O.R. (3d) 161, [2012] O.J. No. 5732, 2012 ONCA 854, 16 C.C.L.I. (5th) 45, 82 E.T.R. (3d) 211, 299 O.A.C. 283, 224 A.C.W.S. (3d) 349; *Browne v. Dunn* (1893), 6 R. 67 (H.L.); *Bruff-Murphy (Litigation guardian of) v. Gunawardena*, [2016] O.J. No. 6, 2016 ONSC 7, [2016] I.L.R. I-5835 (S.C.J.); *Desbiens v. Mordini*, [2004] O.J. No. 4735, 135 A.C.W.S. (3d) 90, 2004 CanLII 41166 (S.C.J.); *Gabremichael v. Zurich Insurance Co*., [1999] O.F.S.C.I.D. No. 198; *Morrison v. Greig*, [2007] O.J. No. 225, 46 C.C.L.T. (3d) 212, 154 A.C.W.S. (3d) 865 (S.C.J.); [page586] *Pietkiewicz v. Sault Ste. Marie District Roman Catholic Separate School Board* (2004), 71 O.R. (3d) 803, [2004] O.J. No. 2811, 132 A.C.W.S. (3d) 260 (C.A.); *R. v. Bingley*, [2017] 1 S.C.R. 170, [2017] S.C.J. No. 12, 2017 SCC 12, 4 M.V.R. (7th) 1, 35 C.R. (7th) 1, 345 C.C.C. (3d) 306, 407 D.L.R. (4th) 383, 2017EXP-643, EYB 2017-276538, 135 W.C.B. (2d) 356; *R. v. Boyne*, [2012] S.J. No. 795, 2012 SKCA 124, 274 C.R.R. (2d) 115, 405 Sask. R. 163, 293 C.C.C. (3d) 304, [2013] 5 W.W.R. 154, 41 M.V.R. (6th) 69, 104 W.C.B. (2d) 1112 [Leave to appeal to S.C.C. refused [2013] S.C.C.A. No. 54]; *R. v. Ghorvei* (1999), 46 O.R. (3d) 63, [1999] O.J. No. 3241, 124 O.A.C. 301, 138 C.C.C. (3d) 340, 29 C.R. (5th) 102, 43 W.C.B. (2d) 308 (C.A.); *R. v. J. (J.-L.)*, [2000] 2 S.C.R. 600, [2000] S.C.J. No. 52, 2000 SCC 51, 192 D.L.R. (4th) 416, 261 N.R. 111, J.E. 2000-2140, 148 C.C.C. (3d) 487, 37 C.R. (5th) 203, 47 W.C.B. (2d) 591; *R. v. K. (A.)* (1999), 45 O.R. (3d) 641, [1999] O.J. No. 3280, 125 O.A.C. 1, 176 D.L.R. (4th) 665, 137 C.C.C. (3d) 225, 27 C.R. (5th) 226, 67 C.R.R. (2d) 189, 43 W.C.B. (2d) 349 (C.A.) [Application for leave to S.C.C. quashed [2000] S.C.C.A. No. 16]; *R. v. Karaibrahimovic*, [2002] A.J. No. 527, 2002 ABCA 102, [2002] 7

W.W.R. 452, 2 Alta. L.R. (4th) 213, 303 A.R. 181, 164 C.C.C. (3d) 431, 3 C.R. (6th) 153, 53 W.C.B. (2d) 414; *R. v. Mohan*, [1994] 2 S.C.R. 9, [1994] S.C.J. No. 36, 114 D.L.R. (4th) 419, 166 N.R. 245, J.E. 94-778, EYB 1994-67655, 71 O.A.C. 241, 89 C.C.C. (3d) 402, 29 C.R. (4th) 243, 23 W.C.B. (2d) 385; *R. v. Ranger* (2003), 67 O.R. (3d) 1, [2003] O.J. No. 3479, 176 O.A.C. 226, 178 C.C.C. (3d) 375, 14 C.R. (6th) 324, 59 W.C.B. (2d) 21 (C.A.); *R. v. Shafia*, [2016] O.J. No. 5627, 2016 ONCA 812, 341 C.C.C. (3d) 354, 368 C.R.R. (2d) 1, 134 W.C.B. (2d) 257; *R. v. White*, [2011] 1 S.C.R. 433, [2011] S.C.J. No. 13, 2011 SCC 13, 412 N.R. 305, 2011EXP-893, 267 C.C.C. (3d) 453, J.E. 2011-478, 332 D.L.R. (4th) 39, 300 B.C.A.C. 165, 82 C.R. (6th) 11, 93 W.C.B. (2d) 626; *Sohi v. ING Insurance Co. of Canada*, [2004] O.F.S.C.D. No. 106

Statutes referred to

Insurance Act, R.S.O. 1990, c. I.8, s. 267.5(12) [as am.]

Rules and regulations referred to

Rules of Civil Procedure, R.R.O. 1990, Reg. 194, rule 4.1.01

APPEAL from the judgment of Kane J. of the Superior Court of Justice, sitting with a jury, dated August 22, 2016.

Geoffrey D.E. Adair, for appellants.

Daniel I. Reisler and *Jessica L. Kuredjian*, for respondent.

The judgment of the court was delivered by
HOURIGAN J.A.: —

A. *Introduction*

[1] The law regarding expert witnesses has evolved considerably over the last 20 years. Gone are the days when an expert served as a hired gun or advocate for the party that retained her. Today, expert witnesses are required to be independent, and their function is to provide the trier of fact with expert opinion evidence that is fair, objective and non-partisan. [page587]

[2] The role of the trial judge in relation to expert witnesses has also evolved. Appellate courts have repeatedly instructed trial judges that they serve as gatekeepers when it comes to the admissibility of expert opinion evidence. They are required to carefully scrutinize, among other things, an expert witness' training and professional experience, along with the necessity of their testimony in assisting the trier of fact, before the expert is qualified to give evidence in our courts. This gatekeeper role is especially important in cases, such as this one, where there is a jury who may inappropriately defer to the expert's opinion rather than evaluate the expert evidence on their own.

[3] In the present case, the trial judge qualified an expert to testify on behalf of the defence despite some very serious reservations about the expert's methodology and independence. It became apparent to the trial judge during the expert's testimony that he crossed the line from an objective witness to an advocate for the defence. Despite his concerns, the trial judge did nothing to exclude the opinion evidence or alert the jury about the problems with the expert's testimony.

[4] On appeal, the appellants advance several arguments to the effect that trial fairness was breached, such that a new trial is necessitated. All of these arguments focus on the impugned expert.

[5] In my view, the appeal must be allowed and a new trial ordered. I reach this conclusion because the trial judge failed to properly discharge his gatekeeper duty at the qualification stage. Had he done so, he would have concluded that the risks of permitting the expert to testify far outweighed any potential benefit from the proposed testimony.

[6] In addition, the trial judge's concerns about the expert's testimony were substantially correct; the witness crossed the boundary of acceptable conduct and descended into the fray as a partisan advocate. In these circumstances, the trial judge was required to fulfill his ongoing gatekeeper function and exclude in whole or in part the expert's unacceptable testimony. Instead, the trial judge did nothing, resulting in trial fairness being irreparably compromised.

B. *Background Facts*

(1) *The trial*

[7] The appellant Liese Bruff-McArthur was hit from behind by the respondent while stopped in her motor vehicle. She alleged that as a consequence of the accident she has suffered multiple soft tissue damages in her neck, lower back and right [page588] shoulder. Ms. Bruff-McArthur also alleged that the accident has left her in an apparent chronic pain condition with attendant anxiety and depression. She says that she is unable to work and that her enjoyment of life has been substantially diminished.

[8] Ms. Bruff-McArthur commenced an action against the respondent, who admitted liability. The sole issue in the 23-day jury trial was what damages, if any, she suffered.

[9] In support of her case, Ms. Bruff-McArthur called a number of physicians who had either treated or examined her, two of whom were retained by insurers to conduct independent medical examinations. The consensus among these witnesses was that she suffered in the manner complained of and that the cause of her suffering was the motor vehicle accident.

[10] The defence called two witnesses, both of them medical expert witnesses who had been retained by the defence to conduct independent medical examinations. The first, Dr. Gianni Maistrelli, an orthopedic specialist, testified that he found nothing wrong with Ms. Bruff-McArthur from a musculosketal standpoint. This conclusion was not surprising given that she was complaining of soft tissue injuries.

(2) *Dr. Bail's evidence*

[11] The other defence expert witness was Dr. Monte Bail, a psychiatrist. Counsel for Ms. Bruff-McArthur objected to his testifying on two grounds.

[12] First, she argued that his report was essentially an attack on Ms. Bruff-McArthur's credibility. Counsel pointed to numerous instances in the report where Dr. Bail commented on discrepancies between the information Ms. Bruff-McArthur provided in her interview with him and what he later found in her medical records. Dr. Bail never put those alleged inconsistencies to Ms. Bruff-McArthur. Counsel sought an order that excluded the parts of Dr. Bail's report that did not meet the test in *Browne v. Dunn* (1893), 6 R. 67 (H.L.) and an order that Dr. Bail not be permitted to testify regarding his views on her credibility.

[13] Second, Ms. Bruff-McArthur argued that Dr. Bail was biased. In support of this argument, counsel submitted that she should be permitted to cross-examine Dr. Bail on findings made in another court case and two arbitrations to the effect that he was not an independent witness. The trial judge ruled, relying on *R. v. Karaibrahimovic*, [2002] A.J. No. 527, 2002 ABCA 102, 2 Alta. L.R. (4th) 213, *R. v. Ghorvei* (1999), 46 O.R. (3d) 63, [1999] O.J. No. 3241 (C.A.) and *Desbiens v. Mordini*, [2004] O.J. No. 4735, 2004 CanLII 41166 (S.C.J.) [page589] that Dr. Bail could not be cross-examined on prior court rulings or arbitration decisions where his testimony was rejected or his objectivity as a witness had been questioned.

[14] The trial judge then put to counsel for Ms. Bruff-McArthur that there remained the issue of whether Dr. Bail had sufficient professional objectivity to provide independent evidence and he asked her if she wished to cross-examine Dr. Bail on this issue as part of a *voir dire*. Counsel declined that offer and elected instead to cross-examine Dr. Bail on the issue as part of her cross-examination in the trial proper.[1]

[15] The trial judge then proceeded to rule that Dr. Bail could not testify on certain sections of his report. The relevant sections were primarily where Dr. Bail was critical of the reliability of the conclusions reached by other doctors examining Ms. Bruff-McArthur. The trial judge also made clear that he did not want Dr. Bail testifying about Ms. Bluff-McArthur's credibility.

[16] Dr. Bail testified in-chief that his methodology was not to review any of a subject's medical records before meeting with them. Consistent with this methodology, after the examination of Ms. Bruff-McArthur, which took just over an hour, Dr. Bail spent ten to 12 hours reviewing her medical records, looking for discrepancies between what she told him in the meeting and what was in the records. These discrepancies formed the largest portion of his report.

[17] In summary, Dr. Bail testified that in his opinion: Ms. Bruff-McArthur did not develop any psychiatric disorders or limitations as a result of the accident; required no psychotherapy or psychotropic medication in relation to the accident; her pre-accident psychiatric profile was not exacerbated by the accident; and she did not require housekeeping or attendant care as a result of any psychiatric condition.

(3) *The verdict*

[18] Dr. Bail was the last witness to testify at trial. After closing submissions, the trial judge gave his charge to the jury. The charge was previously subject to a pre-charge conference and it was provided to the parties in advance of being presented to the juries. No objection was made to the charge and no special instruction regarding Dr. Bail's testimony was requested. [page590]

[19] As part of his charge, the trial judge reviewed very briefly Dr. Bail's testimony. He did not instruct the jury regarding the duty of expert witnesses. Nor did he raise any concerns with respect to the substance of Dr. Bail's testimony or his independence.

[20] After the jury retired to consider their verdict, defence counsel brought a threshold motion, arguing that Ms. Bruff-McArthur did not meet the threshold in s. 267.5(12) of the *Insurance Act*, R.S.O. 1990, c. I.8 of suffering a permanent serious impairment of an important physical, mental or psychological function.

[21] Following completion of the motion, the jury returned with a verdict assessing general damages at $23,500 and rejecting all other heads of damages, including special damages, future care costs and past and future income loss.

(4) *Threshold motion ruling*

[22] Approximately one month later, the trial judge released his reasons on the threshold motion: see *Bruff-Murphy (Litigation guardian of) v. Gunawardena*, [2016] O.J. No. 6, 2016 ONSC 7, [2016] I.L.R. I-5835 (S.C.J.). He concluded that Ms. Bruff-McArthur's claim for general damages met the threshold in s. 267.5(12) of the *Insurance Act*. In reaching that conclusion, the trial judge analyzed the evidence adduced at trial, including the evidence of Dr. Bail.

[23] I note parenthetically the respondent's submission that this court should not rely on the ruling on the threshold motion because it was released after the jury's verdict. In what follows, I will only reference the ruling on the threshold motion to gain insight into the trial judge's concerns with Dr. Bail's testimony and to understand the trial judge's reasons for permitting Dr. Bail to testify. When it comes to determining whether the trial judge's concerns were justified or misplaced, I will conduct my own review of the record.

[24] In his ruling, the trial judge stated, at para. 58, that during the trial he permitted Dr. Bail to testify because of the "very high threshold before a court may exclude expert testimony for bias established by the Supreme Court in *White Burgess Langille Inman v. Abbott and Haliburton Co*., 2015 SCC 23, [2015] 2 S.C.R. 182, at paras. 48-49".

[25] The trial judge's analysis of Dr. Bail's evidence was highly critical and included the following observations:

- The vast portion of his testimony in-chief consisted of Dr. Bail telling the jury about prior medical notations and how they contradict what Ms. Bruff-McArthur allegedly told him in his interview (para. 68). [page591]

- The only semi-psychiatric element of Dr. Bail's report was entitled "Mental Status Examination", which consumed one half [of] a page of the 20-page report (para. 69).

- In order to be fair and objective, Dr. Bail should have asked the plaintiff why her verbal reporting of her prior medical condition was so vastly different from her prior medical records. Dr. Bail could not do that because his methodology in conducting independent medical examinations was to not read such medical records before the interview (para. 70).

- Dr. Bail testified that he discarded any notes he may have made during his interview of Ms. Bruff-McArthur

- as to what she allegedly told him. His only record of her comments was contained in his report dictated after he interviewed Ms. Bruff-McArthur and after his subsequent lengthy review of her medical records (para. 73).

- Dr. Bail was making up evidence as he testified to support his conclusions adverse to Ms. Bruff-McArthur
- (para. 108).

- The vast majority of Dr. Bail's report and testimony in-chief was not of a psychiatric nature but was presented
- under the guise of expert medical testimony and the common presumption that a member of the medical profession will be objective and tell the truth (para. 122).

[26] The trial judge found that Dr. Bail was not a credible witness and did not honour his obligation and written undertaking to be fair, objective and non-partisan pursuant to rule 4.1.01 of the Rules of Civil Procedure, R.R.O. 1990, Reg. 194. Hesummarized Dr. Bail's evidence as follows, at paras. 123-25:

> The vast majority of Dr. Bail's testimony to the jury amounted to nothing other than the following:
>
> (a) The plaintiff did not tell me the truth in my interview;
>
> (b) Here are all the instances I found in my 10 to 12 hour review of her medical records which prove that she did not tell me the truth;
>
> (c) If I as a psychiatrist cannot believe her; how can you?
>
> The primary purpose of R. 4.1.01 is to prohibit and prevent such testimony in the guise of an expert. Dr. Bail undertook and thereby promised to not do what he did in front of this jury. I will not qualify witnesses as experts in the future whose reports present an approach similar to that of Dr. Bail in this case. [page592]

C. *Issues*

[27] This appeal raises the following issues:

- Did the trial judge err in not permitting Ms. Bruff-McArthur to cross-examine Dr. Bail on prior court and
- arbitral findings made against him?

- Did the trial judge err in qualifying Dr. Bail as an expert and/or in not intervening or taking steps to exclude
- Dr. Bail's testimony?

- Did the respondent violate the rule in *Browne v. Dunn*?
-

[28] As I will discuss in the analysis section of my reasons, I have concluded that the trial judge did not err in ruling that Dr. Bail could not be cross-examined regarding prior court and arbitral findings made against him. However, the trial judge did err in permitting Dr. Bail to testify

and in failing to exclude in whole or in part Dr. Bail's testimony and, consequently, a new trial is required. Given this finding, it is unnecessary to consider the *Browne v. Dunn* argument.

D. *Analysis*

(1) *The scope of Dr. Bail's cross-examination*

[29] Counsel for Ms. Bruff-McArthur sought to cross-examine Dr. Bail on three previous comments regarding his testimony in other cases, indicating that he had

- become an advocate for the party calling him as a witness, which is not the role of an expert: see *Morrison v. Greig*, [2007] O.J. No. 225, 46 C.C.L.T. (3d) 212 (S.C.J.), at paras. 47-48;

- appropriated the role of advocate of the insurer rather than an impartial witness, took a partisan approach and focused on inconsistencies in the information given by claimant, such that his credibility was seriously weakened and should be disregarded: see *Gabremichael v. Zurich Insurance Co.*, [1999] O.F.S.C.I.D. No. 198, at paras. 31-33; and

- presented as a notably partisan witness: see *Sohi v. ING Insurance Co. of Canada*, [2004] O.F.S.C.D. No. 106, at para. 38.

[30] Ms. Bruff-McArthur submits that the trial judge erred in denying her the right to cross-examine Dr. Bail on these findings [page593] because the trial judge failed to draw a distinction between prior comments rejecting the evidence of the witness and prior findings of discreditable conduct, namely, the failure of Dr. Bail to abide by his oath as an expert.

[31] I do not accept this argument. In my view, the prior comments made about Dr. Bail do not amount to a finding of discreditable conduct. Rather, they are the opinions of a judge and two arbitrators regarding the reliability of his testimony in particular cases. This is analogous to the situation in *Ghorvei*, where a witness' credibility had been attacked in previous proceedings. Charron J.A. (as she then was) held, at para. 31, that those credibility findings from the previous proceedings were not proper material for cross-examination:

> In my view, it is not proper to cross-examine a witness on the fact that his or her testimony has been rejected or disbelieved in a prior case. That fact, in and of itself, does not constitute discreditable conduct. I do not think it would be useful to allow cross-examination of a witness on what is, in essence, no more than an opinion on the credibility of unrelated testimony given by this witness in the context of another case. The triers of fact who would witness this cross-examination would not be able to assess the value of that opinion and the effect, if any, on the witness's credibility without also being provided with the factual foundation for the opinion.

See, also, *R. v. Boyne*, [2012] S.J. No. 795, 2012 SKCA 124, 405 Sask. R. 163, at paras. 48-51, leave to appeal to S.C.C. refused [2013] S.C.C.A. No. 54.

[32] In the present case, the comments of the judge and arbitrators about Mr. Bail's testimony in the previous cases would have been of no assistance to the jury without an understanding of their factual foundation. That necessary context would only have served to divert the jury from the task at hand and convert the trial into an inquiry regarding the reliability of Dr. Bail's testimony in the three other proceedings. Thus, in my view, the trial judge did not err in prohibiting this line of cross-examination.

(2) *The trial judge's gatekeeper role with respect to expert opinion evidence*

(1) *Qualification stage*

[33] Ms. Bruff-McArthur submits that the trial judge should have exercised his gatekeeper function to exclude Dr. Bail from testifying on the grounds that his methodology was unfair; he was biased; he was engaged in an exercise to destroy her credibility; and his prospective evidence would amount to a violation of the rule in *Browne v. Dunn*. In the alternative, she argues that the trial judge erred in not instructing the jury that they should disregard Dr. Bail's testimony. [page594]

[34] In *White Burgess Langille Inman v. Abbott and Haliburton Co*., [2015] 2 S.C.R. 182, [2015] S.C.J. No. 23, a decision released shortly before the judgment under appeal, the Supreme Court of Canada provided clarity and guidance regarding challenges to experts on the basis of bias and lack of independence. Cromwell J., writing for the court, stated, at para. 19, that the basic structure for the law relating to the admissibility of expert evidence has two main components.

[35] The first component requires the court to consider the four traditional "threshold requirements" for the admissibility of the evidence established in *R. v. Mohan*, [1994] 2 S.C.R. 9, [1994] S.C.J. No. 36: (i) relevance; (ii) necessity in assisting the trier of fact; (iii) absence of an exclusionary rule; and (iv) the need for the expert to be properly qualified.

[36] The second component is a "discretionary gatekeeping step" where "the judge balances the potential risks and benefits of admitting the evidence in order to decide whether the potential benefits justify the risks": para. 24. It is a cost-benefit analysis under which the court must determine whether the expert evidence should be admitted because its probative value outweighs its prejudicial effect.

[37] The analysis under the second component is best thought of as a specific application of the court's general residual discretion to exclude evidence whose prejudicial effect exceeds its probative value: *R. v. Bingley*, [2017] 1 S.C.R. 170, [2017] S.C.J. No. 12, 2017 SCC 12, 407 D.L.R. (4th) 383, at para. 16. As Charron J.A. wrote in *R. v. K. (A.)* (1999), 45 O.R. (3d) 641, [1999] O.J. No. 3280 (C.A.), at para. 76, application for leave to S.C.C. quashed [2000] S.C.C.A. No. 16: "The balancing process which lies at the core of the determination of the admissibility of this kind of evidence is not unique to expert opinion evidence. It essentially underlies all our rules of evidence." In *White Burgess*, Cromwell J. referenced *Mohan* and made the same point, at paras. 19 and 20:

> *Mohan* also underlined the important role of trial judges in assessing whether otherwise admissible expert evidence should be excluded because its probative value was overborne

> by its prejudicial effect -- a residual discretion to exclude evidence based on a cost-benefit analysis: p. 21.
>
> . . . . .
>
> The reasons in *Mohan* engaged in a cost-benefit analysis with respect to particular elements of the four threshold requirements, but they also noted that the cost-benefit analysis could be an aspect of exercising the overall discretion to exclude evidence whose probative value does not justify its admission in light of its potentially prejudicial effects: p. 21. [page595]

[38] Cromwell J. further explained that lack of independence or impartiality on the part of an expert witness goes to the admissibility of the witness' testimony, not just to its weight: para. 40. Specifically, in the governing framework for admissibility, the court should consider an expert's potential bias when determining whether the expert is properly qualified at the initial threshold inquiry: para. 53.

[39] However, he added that bias should also be considered when the court exercises its gatekeeping exclusionary discretion, writing, at para. 54:

> Finding that expert evidence meets the basic threshold does not end the inquiry. Consistent with the structure of the analysis developed following *Mohan* which I have discussed earlier, *the judge must still take concerns about the expert's independence and impartiality into account in weighing the evidence at the gatekeeping stage*. At this point, relevance, necessity, reliability and absence of bias can helpfully be seen as part of a sliding scale where a basic level must first be achieved in order to meet the admissibility threshold and thereafter continue to play a role in weighing the overall competing considerations in admitting the evidence. At the end of the day, the judge must be satisfied that the potential helpfulness of the evidence is not outweighed by the risk of the dangers materializing that are associated with expert evidence.

(Emphasis added)

In the overview of his discussion of the admissibility of expert opinion evidence, he instructed, at para. 34, that

> [a] proposed expert's independence and impartiality go to admissibility and not simply to weight and there is a threshold admissibility requirement in relation to this duty. Once that threshold is met, *remaining concerns about the expert's compliance with his or her duty should be considered as part of the overall cost-benefit analysis which the judge conducts to carry out his or her gatekeeping role*.

(Emphasis added)

[40] In the present case, the trial judge cited *White Burgess* and appears to have relied upon Cromwell J.'s statement that in the threshold inquiry it would be quite rare for a proposed expert's evidence to be ruled inadmissible. As Cromwell J. noted, at para. 49, all that needs to be established at that stage is whether the expert is "able and willing to carry out his or her

primary duty to the court". The trial judge concluded that Dr. Bail met this rather low threshold requirement.

[41] That was a discretionary decision, which is entitled to deference from this court: *R. v. Shafia*, [2016] O.J. No. 5627, 2016 ONCA 812, 341 C.C.C. (3d) 354, at para. 248. Another judge might well have concluded that Dr. Bail failed to meet even this low threshold test. I do not need to decide whether the trial judge erred on this point, however, because he clearly erred [page596] in principle in failing to proceed to the next step of the analysis -- consideration of the cost-benefit analysis in Dr. Bail's testimony. The trial judge did not reference this second component of his discretionary gatekeeper role. To the contrary, he appears to have believed that he was obliged to qualify Dr. Bail once he concluded that the witness met the initial *Mohan* threshold. There is, therefore, no decision to defer to and it falls to this court to conduct the second part of the analysis.

[42] In my view, on a proper balancing, the potential risks of admitting Dr. Bail's evidence far outweighed the potential benefit of the testimony. It was evident from a review of Dr. Bail's report that there was a high probability that he would prove to be a troublesome expert witness, one who was intent on advocating for the defence and unwilling to properly fulfill his duties to the court.

[43] The first red flag was Dr. Bail's methodology. There is a real risk of unfairness in engaging in a hunt for discrepancies between what a plaintiff says during a short interview and what medical records dating back several years reveal. This unfairness is exacerbated when the expert denies the plaintiff the opportunity to explain the apparent discrepancies. As anyone with the slightest experience with litigation would attest to, oftentimes what appears to be an inconsistency in witness' evidence is not an inconsistency at all. Oftentimes all that is required is a simple explanation to resolve what appears to be a conflict in what a witness said on two different occasions. Ms. Bruff-McArthur was not given an opportunity to offer such an explanation.

[44] A related concern is that the vast bulk of the content in Dr. Bail's report was the recitation of perceived inconsistencies between what Ms. Bruff-McArthur said in the independent medical examination and what the medical records revealed. In conducting that analysis, Dr. Bail was not bringing to bear any medical expertise. This was work that is routinely done by trial lawyers and law students or clerks in preparation for a cross-examination. Thus, the benefit of the evidence was very low, while the potential mischief was very high, especially given that none of these inconsistencies were put to Ms. Bruff-McArthur.

[45] It was also clear from the report that Dr. Bail was coming dangerously close to usurping the role of the jury in assessing Ms. Bruff-McArthur's credibility. In the "Summary and Conclusions" section of his report, he opines:

> It is my opinion that if Ms. Bruff-McArthur was being forthright, this pattern of discrepancies and inconsistencies should not exist. I am therefore of the opinion that Ms. Bruff-McArthur has not been forthright with respect to [page597] her accident related claims and her provided medical and psychological history, and that the history which she has been providing over time since the accident cannot be relied upon. It is evident that Ms. Bruff-McArthur has serious credibility issues regarding her accident related claims.

In the penultimate paragraph of his report, he states: "lack of reliability, credibility and validity are factors in this case".

[46] Next, the whole tone of the report was a reliable predictor of Dr. Bail's testimony. He goes out of his way to make points that are meant to damage Ms. Bruff-McArthur's case. For example, he opines on the views of several physicians who examined Ms. Bruff-McArthur, concluding that she misled them. Dr. Bail speculates that one of her therapists may have been improperly holding herself out as a qualified psychologist. He criticizes a psychiatrist who treated Ms. Bruff-McArthur, Dr. Arora, because they discussed "personal family things, such as her daughters' potty training and her son's school problems" when "psychotherapy was requested and paid solely in relation to treating accident related claims". Dr. Bail notes that Ms. Bruff-McArthur and Dr. Arora discussed the notions of karma and reincarnation. He chastises Dr. Arora for introducing personal religious beliefs in a therapy session. I note that there is no evidence that these topics reflect Dr. Arora's personal beliefs.

[47] I could go on with further examples, but the point is that in his report Dr. Bail goes beyond a mere lack of independence and appears to have adopted the role of advocate for the defence. Given the paucity of psychiatric analysis in the report versus the high degree of potential prejudice in wrongly swaying the jury, a cost-benefit analysis would have invariably lead to the conclusion that Dr. Bail should have been excluded from testifying.

[48] To be fair to the trial judge, he attempted to ameliorate these concerns by specifically instructing the witness not to testify regarding certain issues, such as his criticism of other doctors. However, as the trial judge essentially acknowledged in his threshold motion ruling, had he undertaken the cost-benefit analysis he would not have permitted Dr. Bail to testify.

(2) *During the expert's testimony*

[49] As we know, the trial judge permitted Dr. Bail to testify and determined that Dr. Bail crossed the line of acceptable expert evidence. In order to analyze his response to this situation, it is first necessary to consider whether the trial judge's concerns regarding Dr. Bail's testimony were well founded. Assuming that they were, the next issue is what the trial judge should have done in the circumstances. [page598]

(1) *Did Dr. Bail's testimony indicate lack of impartiality?*

[50] I have had the opportunity to consider in detail Dr. Bail's evidence and I concur with the trial judge that it is most troubling. For present purposes, it is unnecessary to recount his testimony in full. Instead, I will focus on some of the more concerning aspects of his testimony.

[51] First, I repeat my concern regarding his methodology. It was fundamentally unfair to Ms. Bruff-McArthur not to give her an opportunity to explain the alleged inconsistencies in the information she provided. As mentioned above, there is a real concern that Dr. Bail was usurping the role of the trier of fact in determining the issue of Ms. Bruff-McArthur's credibility. Despite that concern, I am willing to acknowledge that in a case such as this, where the existence and extent of the alleged injuries are not easily determined, consideration of the plaintiff's veracity is a necessary part of an independent medical examination. However, if Dr.

Bail were serious about probing this issue, he would not have adopted this methodology. He would have reviewed the inconsistencies with Ms. Bruff-McArthur.

[52] Second, and equally troubling, is that to the extent that Dr. Bail referred to the scientific testing conducted, he torqued the results so that they produced results that supported his conclusion. For example, he testified that Ms. Bruff-McArthur was administered a test where she was instructed to count backwards from 100 by sevens. He noted that she provided a few incorrect answers in her count. Dr. Bail considered this to be an inconsistency because she was able to get some of the count right but also made mistakes. For Dr. Bail, inconsistencies meant that the subject was not being truthful about her condition.

[53] Dr. Bail then testified that in cases where a subject mathematically "just doesn't have it together", he asks them to recite the months of the year in reverse order. Apparently, Ms. Bruff-McArthur did very well on this test, answering correctly and quickly. Dr. Bail testified that this result was also an inconsistency because she did so well on that test and so poorly on the sevens test. So, despite the fact that Dr. Bail testified that he administers the month test as a check for those who are not mathematically inclined, he calls into question her credibility for doing well on the month test and faring poorly on the sevens test.

[54] Dr. Bail went on to administer another mathematical test, requiring her to calculate how many $1.50 magazines could be purchased with $10. Ms. Bruff-McArthur did not do well on [page599] this test and Dr. Bail considered this to be an inconsistency. The other logical conclusion, that Ms. Bruff-McArthur was consistently weak in performing math exercises, seems not to have crossed his mind.

[55] In short, the tests were deliberately interpreted to fit a theory of mendacity. Unless she got every question on every test correct, she was inconsistent and, in Dr. Bail's opinion, inconsistency equated to an untruthful subject.

[56] A third concern relates to a subtle point that demonstrates Dr. Bail's fundamental misconception of his role. He questioned Ms. Bruff-McArthur regarding her physical limitations. It is, of course, perfectly appropriate for a psychiatrist conducting an independent medical examination to ask questions about a subject's physical injuries and resultant limitations. That information could provide useful context for the examination. However, Dr. Bail was quite open about the fact that he asked the questions for an entirely different purpose. He testified that he asked about physical limitations so that he could compare those answers to any future surveillance evidence he may receive. This is consistent with how Dr. Bail regarded the purpose of his review of the medical records. There is a troubling pattern that suggests that he understands his primary role to be to expose inconsistencies and not to provide a truly independent assessment of Ms. Bruff-McArthur's psychiatric condition.

[57] Fourth, when Dr. Bail was cross-examined about his emphasis on perceived inconsistencies, he denied ignoring those parts of the medial records that did not fit his diagnosis. He explained their absence from his report on the basis that "you can't put everything in your report". Later in his cross-examination, Dr. Bail stated: "I'm interested in the things that don't corroborate, not the things that do corroborate." Again, this testimony makes plain Dr. Bail's lack of awareness of the need to be impartial as an expert witness.

[58] Before turning to what the trial judge should have done in face of this testimony, I wish to correct one of his findings. The trial judge stated in his reasons on the threshold motion that Dr.

Bail did not have any notes of his examination of Ms. Bruff-McArthur. Based on this observation, he concluded that Dr. Bail was making his testimony up as he went along to support his position.

[59] That is not accurate. Dr. Bail did have notes. Indeed, the trial judge ruled that he could refer to them as he testified. It is not a fair conclusion that Dr. Bail was making up his testimony. Having reviewed his evidence carefully, I am of the view that there is no basis to conclude that Dr. Bail was anything but [page600] truthful in his testimony. I have concerns regarding Dr. Bail's independence and his methodology; I do not have any concerns about his veracity.

(2) *What should the trial judge have done in this case?*

[60] Under the *White Burgess* framework, and in most other leading cases on the admissibility of expert evidence, the issue of admissibility is decided at the time the evidence is proffered and the expert witness' qualification is requested by a party. To the extent that this is possible, it should be the norm: *R. v. J. (J.-L.)*, [2000] 2 S.C.R. 600, [2000] S.C.J. No. 52, 2000 SCC 51, at para. 28.

[61] In the present case, however, the trial judge appears to have assumed that, once Dr. Bail was qualified as an expert, his gatekeeper role was at an end. The trial judge erred in law in reaching that conclusion.

[62] A trial judge in a civil jury case qualifying an expert has a difficult task. She must make a decision based on an expert report that will, in most cases, never be seen by the jury. While the report provides a roadmap of the anticipated testimony and specific limits may be placed on certain areas of testimony, the trial judge obviously cannot predict with certainty the nature or content of the expert's testimony.

[63] Where, as here, the expert's eventual testimony removes any doubt about her independence, the trial judge must not act as if she were *functus*. The trial judge must continue to exercise her gatekeeper function. After all, the concerns about the impact of a non-independent expert witness on the jury have not been eliminated. To the contrary, they have come to fruition. At that stage, when the trial judge recognizes the acute risk to trial fairness, she must take action.

[64] Charron J.A. made this point in *K. (A.)*, writing as follows, at para. 73:

> In some cases it may be possible to rule on the admissibility of the proposed evidence on the basis of counsel's submissions alone. However it may at times prove necessary to hold a *voir dire* in order to properly consider all relevant factors. Where the trial is before a jury and the question of admissibility cannot be clearly determined in a summary fashion, it may indeed be prudent to scrutinize the evidence during the course of a *voir dire* before admitting it. *While in some cases the ruling can be made early in the proceedings, in other cases, it may be only later in the trial that the value of the proposed evidence can be properly assessed.* For example, in this case, it was only after the main Crown witnesses had testified and the defence strategy became apparent that the determination of the admissibility of the expert evidence could properly be made.

(Emphasis added and footnote omitted) [page601]

And in a later decision in *R. v. Ranger* (2003), 67 O.R. (3d) 1, [2003] O.J. No. 3479 (C.A.), at para. 63, Charron J.A. stated:

> [The dangers of expert opinion evidence] must be considered in the balancing process that forms part of the test for admissibility. Further, *the trial judge's gatekeeper function does not end with the ruling on admissibility*. The expert evidence must be carefully constrained in its presentation with a view to minimizing the associated dangers so that, in the end result, the judge is still satisfied that the probative value of the evidence exceeds its prejudicial effect and is properly admissible.

(Emphasis added)

[65] As mentioned above, the cost-benefit analysis under the second component of the framework for admitting expert evidence is a specific application of the court's general residual discretion to exclude evidence whose prejudicial effect is greater than its probative value. This general residual discretion is always available to the court, not just when determining whether to admit an item of evidence, but after the admission stage if the evidence's prejudicial effect is only revealed in the course of its presentation to the trier of fact.

[66] An instructive discussion is found in *R. v. White*, [2011] 1 S.C.R. 433, [2011] S.C.J. No. 13, 2011 SCC 13, a case that dealt with the admissibility of post-offence conduct in criminal matters. A majority of the Supreme Court stated, at para. 50:

> Otherwise admissible evidence may still be removed from consideration by the jury on the basis that it is more prejudicial than probative. This may be achieved by refusing to admit the evidence at trial. *It can also happen that the disproportionately prejudicial nature of a certain item of evidence only becomes apparent in light of the evidence as a whole.* The trial judge may then instruct the jury in his charge that they may not consider a certain item of evidence in their deliberations.

(Emphasis added)

The discussion from *White* makes clear that the court's residual discretion to exclude prejudicial evidence is an ongoing one that continues throughout a trial. It may be invoked if prejudice manifests after initially admitting the evidence. Thus, because the second component of the framework for admitting expert evidence is an application of this residual discretion, the court has residual discretion to exclude expert evidence even after admitting it, if later in the trial prejudice emerges that was not apparent at the time of admission.

[67] Given this ongoing gatekeeper discretion, the question remains of what, as a practical matter, the trial judge could or should have done in this case. His first option would have been to advise counsel that he was going to give either a mid-trial or final instruction that Dr. Bail's testimony would be excluded in [page602] whole or in part from the evidence. Had he taken that route, he would have received submissions from counsel in the absence of the jury and proceeded as he saw fit. Alternately, he could have asked for submissions from counsel on a mistrial, again in the absence of the jury, and ruled accordingly. In the event that he had to

interrupt Dr. Bail's testimony mid-trial, he would have had to consider carefully how best to minimize the potential prejudicial effect of the interruption from the respondent's perspective.

[68] The point is that the trial judge was not powerless and should have taken action. The dangers of admitting expert evidence suggest a need for a trial judge to exercise prudence in excluding the testimony of an expert who lacks impartiality before those dangers manifest.

[69] I am mindful that counsel for Ms. Bruff-McArthur did not seek an instruction regarding Dr. Bail's evidence. The law is generally that the failure to object to a civil jury charge is fatal to a request for a retrial on appeal based on misdirection or non-direction. However, this rule is subject to the exception that where the misdirection or non-direction resulted in a substantial wrong or miscarriage of justice, it may warrant a new trial: *Pietkiewicz v. Sault Ste. Marie District Roman Catholic Separate School Board* (2004), 71 O.R. (3d) 803, [2004] O.J. No. 2811 (C.A.), at paras. 22-28; and *Briscoe Estate v. Canadian Premiere Life Insurance Co.* (2012), 113 O.R. (3d) 161, [2012] O.J. No. 5732, 2012 ONCA 854, at paras. 70-71. In my view, the admission of Dr. Bail's testimony resulted in a miscarriage of justice.

[70] I would go further and state that, given the importance of a trial judge's ongoing gatekeeper role, the absence of an objection or the lack of a request for a specific instruction does not impair a trial judge's ability to exercise her residual discretion to exclude evidence whose probative value is outweighed by its prejudicial effect.

[71] The respondent submits that even if this court concludes that Dr. Bail's testimony should have been excluded, there is no basis to order a new trial because he was just one of many witnesses and his testimony likely did not have a significant impact on the jury's verdict.

[72] It is impossible to gauge with any certainty the impact of Dr. Bail's testimony. The fact that he was one of only two witnesses to testify for the defence suggests that his testimony may well have been an important factor in the jury's analysis of the case. In any event, a focus on the inability to measure the precise prejudice caused by the testimony misses the point entirely, which is that there has been a miscarriage of justice in this case. [page603] This court has a responsibility to protect the integrity of the justice system. This is not a "no harm, no foul" situation. No doubt, another trial will be costly and time consuming, but it is necessary because the defence proffered the evidence of a wholly unsuitable expert witness.

E. *Disposition*

[73] I would grant the appeal, set aside the judgment below and order a new trial. I would award the appellants their costs of the appeal in the amount of $22,000, inclusive of fees, disbursements and applicable taxes.

[74] The parties may make written submissions on the issue of the costs of the first trial.

Appeal allowed.

Notes

1 On appeal, the appellants are represented by different counsel than the counsel they were represented by at trial.

End of Document

WARNING

The President of the panel hearing this appeal directs that the following should be attached to the file:

An order restricting publication in this proceeding under ss. 486.5(1), (2), (3), (4), (5), (6), (7), (8) or (9) or 486.6(1) or (2) of the *Criminal Code* shall continue. These sections of the *Criminal Code* provide:

> 486.5 (1) Unless an order is made under section 486.4, on application of the prosecutor, a victim or a witness, a judge or justice may make an order directing that any information that could identify the victim or witness shall not be published in any document or broadcast or transmitted in any way if the judge or justice is satisfied that the order is necessary for the proper administration of justice.
>
> (2) On application of a justice system participant who is involved in proceedings in respect of an offence referred to in subsection 486.2(5) or of the prosecutor in those proceedings, a judge or justice may make an order directing that any information that could identify the justice system participant shall not be published in any document or broadcast or transmitted in any way if the judge or justice is satisfied that the order is necessary for the proper administration of justice.
>
> (3) An order made under this section does not apply in respect of the disclosure of information in the course of the administration of justice if it is not the purpose of the disclosure to make the information known in the community.
>
> (4) An applicant for an order shall
>
> > (a) apply in writing to the presiding judge or justice or, if the judge or justice has not been determined, to a judge of a superior court of criminal jurisdiction in the judicial district where the proceedings will take place; and

(b) provide notice of the application to the prosecutor, the accused and any other person affected by the order that the judge or justice specifies.

(5) An applicant for an order shall set out the grounds on which the applicant relies to establish that the order is necessary for the proper administration of justice.

(6) The judge or justice may hold a hearing to determine whether an order should be made, and the hearing may be in private.

(7) In determining whether to make an order, the judge or justice shall consider

(a) the right to a fair and public hearing;

(b) whether there is a real and substantial risk that the victim, witness or justice system participant would suffer significant harm if their identity were disclosed;

(c) whether the victim, witness or justice system participant needs the order for their security or to protect them from intimidation or retaliation;

(d) society's interest in encouraging the reporting of offences and the participation of victims, witnesses and justice system participants in the criminal justice process;

(e) whether effective alternatives are available to protect the identity of the victim, witness or justice system participant;

(f) the salutary and deleterious effects of the proposed order;

(g) the impact of the proposed order on the freedom of expression of those affected by it; and

(h) any other factor that the judge or justice considers relevant.

(8) An order may be subject to any conditions that the judge or justice thinks fit.

(9) Unless the judge or justice refuses to make an order, no person shall publish in any document or broadcast or transmit in any way

(a) the contents of an application;

(b) any evidence taken, information given or submissions made at a hearing under subsection (6); or

(c) any other information that could identify the person to whom the application relates as a victim, witness or justice system participant in the proceedings. 2005, c. 32, s. 15.

486.6 (1) Every person who fails to comply with an order made under subsection 486.4(1), (2) or (3) or 486.5(1) or (2) is guilty of an offence punishable on summary conviction.

(2) For greater certainty, an order referred to in subsection (1) applies to prohibit, in relation to proceedings taken against any person who fails to comply with the order, the publication in any document or the broadcasting or transmission in any way of information that could identify a victim, witness or justice system participant whose identity is protected by the order. 205, c. 32, s. 15.

COURT OF APPEAL FOR ONTARIO

CITATION: R. v. Abbey, 2017 ONCA 640
DATE: 20170804
DOCKET: C57750

Doherty, Laskin and Roberts JJ.A.

BETWEEN

Her Majesty the Queen

Respondent

and

Warren Nigel Abbey

Appellant

David E. Harris and Ravin Pillay, for the appellant

Alexander Alvaro, for the respondent

Heard: February 15, 2017

On appeal from the conviction entered by Justice J. David McCombs of the Superior Court of Justice, sitting with a jury, on March 28, 2011.

LASKIN J.A.:

A. INTRODUCTION

[1] Warren Abbey has been tried twice before a judge and jury for the first degree murder of a young man named Simeon Peter. At his first trial Abbey was acquitted. At the second trial – after the Crown successfully appealed his

acquittal and obtained an order for a new trial – Abbey was convicted. He appeals his conviction.

[2] The main issue at both trials was the identity of the murderer: who killed Peter? And the Crown's theory at both trials was identical: Abbey, who was an associate of a street gang, shot and killed Peter because he believed – though mistakenly – that Peter was a member of a rival street gang.

[3] However, the Crown's evidence against Abbey at the two trials differed in one important way. At Abbey's first trial the trial judge ruled that the Crown's expert on gang culture, Mark Totten, could not give an opinion on the meaning of a teardrop tattoo, which Abbey had obtained under his right eye some four months after the murder. At Abbey's second trial – after this court overturned the trial judge's ruling – Totten gave evidence about the meaning of a teardrop tattoo on the face of a young male gang member.

[4] Totten testified that a teardrop tattoo meant one of three things: the wearer of the tattoo had lost a loved one or a fellow gang member; the wearer had spent "hard" time in prison; or the wearer had murdered a rival gang member. Then, Totten buttressed his opinion with a powerful set of statistics, which were drawn from six studies he authored between 1995 and 2005, and which the Crown relied on to argue Abbey had obtained a teardrop tattoo to signify he had killed a rival gang member.

[5] On this appeal Abbey seeks to introduce fresh evidence to impeach the credibility and reliability of Totten's statistical evidence. The fresh evidence has three components: the evidence of Totten elicited by the Crown in an unrelated murder trial, *R. v. Gager*,[1] which took place after Abbey's second trial; eight research studies on street gangs conducted by Totten, of which six predated Abbey's two trials and formed the basis for Totten's statistical evidence on teardrop tattoos; and data from Statistics Canada on the number of homicides in Ontario.

[6] Almost all of the information on which Totten was cross-examined in *Gager*, including the six research studies he relied on for his opinion, were available to the defence before Abbey's two trials. Yet the defence chose not to adduce this evidence at either trial, and instead took a different approach to Totten's cross-examination. Thus, whether the fresh evidence is admissible turns on its cogency and on the effect of Abbey's failure to adduce it at trial.

[7] Abbey submits that the fresh evidence shows Totten's trial evidence about teardrop tattoos to be fabricated, or at least unsupported by the six studies he claimed he relied on. Thus the fresh evidence is sufficiently cogent that if the trial judge had the benefit of it Totten would not have been qualified as an expert on the meaning of a teardrop tattoo and the jury would not have heard his evidence.

[1] See 2012 ONSC 1472, in which Clark J. provides his reasons for permitting Totten to testify on certain issues.

The absence of Totten's evidence could reasonably be expected to have affected the verdict. The defence's failure to adduce this evidence at trial should not bar its admissibility on appeal. The interests of justice warrant its admission to prevent a miscarriage of justice. Abbey asks that we overturn his conviction and enter an acquittal, or at least order a new trial.

[8] For the most part the Crown does not challenge the fresh evidence. But the Crown submits that the fresh evidence would not have the effect of disqualifying Totten as an expert witness. At most, it might affect the weight a jury would give to his evidence. Most important, the fresh evidence should not give this court any concern about the reliability of Abbey's conviction or the possibility of a miscarriage of justice. The defence made a tactical decision not to adduce this evidence at trial and should not be entitled to revisit that decision on appeal. The Crown asks that Abbey's application to introduce fresh evidence and his appeal be dismissed.

[9] Although this appeal turns almost entirely on Abbey's fresh evidence application, Abbey also submits that the trial judge made one error in his charge to the jury: he failed to instruct the jury not to consider Totten's evidence on the timing of obtaining a teardrop tattoo. The issues on this appeal may therefore be stated as follows:

(1) Is the fresh evidence sufficiently cogent to have disqualified Totten from giving expert evidence about the meaning of a teardrop tattoo?
(2) Would the absence of Totten's evidence reasonably be expected to have affected the verdict?
(3) Does the defence's failure to adduce the fresh evidence at trial affect its admissibility on appeal?
(4) Did the trial judge err by failing to instruct the jury not to consider Totten's evidence on the timing of obtaining a teardrop tattoo?
(5) What is the appropriate remedy?

[10] I would answer "yes" to the questions posed in issues 1 and 2, and "no" to the questions posed in issues 3 and 4. In essence, I have concluded that the fresh evidence shows Totten's opinion evidence on the meaning of a teardrop tattoo to be too unreliable to be heard by a jury. If the trial judge had known about the fresh evidence he would have ruled Totten's evidence inadmissible. And the absence of Totten's evidence would reasonably be expected to have affected the jury's verdict. I would admit the fresh evidence, allow Abbey's appeal, overturn his conviction and order a new trial.

B. BACKGROUND

(a) The murder of Simeon Peter

[11] On January 8, 2004, in the middle of the afternoon, Simeon Peter was shot and killed in Caronia Square, near Sheppard Avenue East and Morningside Avenue in Scarborough. He was 19 years old. Abbey, then 18 years old, was charged with first degree murder.

[12] Abbey was an associate of the Malvern Crew, a street gang in Scarborough. Back in 2004 the Malvern Crew was engaged in a brutal turf war with another Scarborough street gang, the Galloway Boys. The Crown alleged that Abbey killed Peter, believing him to be a member of the Galloway Boys. Sadly he was not. He was simply in the wrong place at the wrong time.

(b) The first trial

[13] The first trial took place in 2007. The parties agreed that whoever shot Peter was guilty of murder. As I have said, the main issue at trial was identity: who was the shooter. The secondary issue was whether the murder was planned and deliberate, thus elevating it to first degree murder.

[14] The Crown relied on the evidence of three other Malvern Crew gang members, each of whose evidence implicated Abbey. The Crown also sought to lead evidence about the meaning of Abbey's teardrop tattoo. That evidence was to come from Totten and the three gang members. Totten was prepared to give evidence that one of the meanings of a teardrop tattoo was that the wearer had killed a rival gang member. The three Malvern Crew gang members were prepared to testify to a similar understanding of the teardrop tattoo. Totten claimed that his opinion was based on academic literature and his own clinical research; the three gang members said that their understanding came from television and movies.

[15] The trial judge ruled that neither Totten nor the three gang members could give evidence about the meaning of a teardrop tattoo because the evidence was too unreliable. Abbey did not testify. As I have said, the jury acquitted him.

(c) The second trial

[16] The Crown appealed Abbey's acquittal and its appeal was allowed: see *R. v. Abbey*, 2009 ONCA 624, 97 O.R. (3d) 330 ("*Abbey #1*"). Doherty J.A., writing for the panel, held that the trial judge had erred in not permitting Totten to give opinion evidence on the meaning of a teardrop tattoo, and in not permitting the three gang members to testify about their understanding of what a teardrop tattoo meant. This court set aside Abbey's acquittal and ordered a new trial.

[17] The new trial took place in the winter of 2011. The Crown led footprint impression evidence, cellphone tower evidence and the evidence of several eyewitnesses, including Peter's girlfriend, who was walking ahead of him when he was shot. None of this evidence, however, conclusively pointed to Abbey as the shooter. Indeed, none of the eyewitnesses could identify Abbey as the shooter, and the trial judge commented to the jury that their evidence was "particularly unclear and confusing".

[18] Thus the two principal components of the Crown's case were the evidence of the three Malvern Crew gang members, Sams, Burton and Williams, implicating Abbey, and the evidence about the meaning of a teardrop tattoo.

(i) The evidence of Sams, Burton and Williams pointing to Abbey as the shooter

[19] Sams, Burton and Williams gave potentially compelling evidence against Abbey.

[20] Sams testified that during the morning of the murder he was in Burton's car and they were driving in the Morningside Avenue and Sheppard Avenue East area when they saw a girl, Clorie-Ann Anderson, whom they recognized, together with a male wearing a hood and a bandana. Sams thought that the male might be a member of the Galloway Boys. They decided to approach the male but wanted a gun before they did so.

[21] So they went to Abbey's house and told him whom they had seen. Abbey got in the car with them. As they were driving they saw Anderson and the male on the bus. They followed the bus and watched the two as they got off. Abbey then got out of the car and walked away. Sams saw Abbey the next day and asked him what had happened. Abbey said he thought the guy had a gun and was pulling it out so he shot him.

[22] Burton gave a different account of what happened the day of the shooting. On his version, Abbey was with him and Sams from the outset. Burton was driving; Sams was in the front passenger seat; and Abbey was in the backseat. At the intersection of Morningside and Sheppard East they saw Anderson with a

male in a fur jacket and a hood, and wearing a bandana over his face. Burton believed him to be a member of the Galloway Boys. Abbey then said he wanted to visit a friend. So Burton dropped him off. Burton claimed that no one in the car said anything about having a gun or wanting to get a gun. And he also said that Sams never asked to go to Abbey's house to get a gun.

[23] Within days of the shooting, the media began circulating details and pictures of the car believed to have been involved in the shooting. Burton at first believed the car to be his – a bright blue Honda. He wondered why a car similar to his was in the news so he questioned Abbey. Abbey denied he had anything to do with the shooting and said if the police contacted Burton "just don't say anything". Abbey, however said the guy who was shot had robbed him two weeks earlier. Burton then confronted Abbey and accused him of being the shooter. Abbey replied he was "not going to really say if it's me or not."

[24] The Crown then refreshed Burton's memory with the statement Burton had given to the police incriminating Abbey. And Burton acknowledged Abbey had told him that he had followed the victim to Caronia Square, pulled out a gun and fired a couple of times shooting the victim in the leg. The victim started running away and Abbey shot him again, then stood over him and shot him a few more times. He pointed the gun at Anderson but realized it was empty so he fled.

[25] Williams testified that in the summer of 2004, while in custody, he questioned Abbey about the shooting. Williams claimed Abbey told him four people were involved but the others were "afraid to do what had to be done, so he took it into his own hands and did it". Williams said Abbey told him he shot the person in the leg and then shot him again. He tried to shoot Anderson but his gun was empty. He then ran back to his house.

[26] Despite their evidence implicating Abbey, the testimony of Sams, Burton and Williams was problematic for the Crown. Sams' and Burton's accounts of the incident differed. What Abbey apparently told each of the three also differed. And most important, each was a most unsavoury witness, and Sams and Burton had made a deal with the Crown to testify.

[27] Although Williams had not made a deal with the Crown, he was a jailhouse informant with a lengthy criminal record. At the time of the murder he was serving a twelve-year sentence for a home invasion robbery at gunpoint. He defied a court order and refused even to testify at Abbey's second trial. His evidence from the first trial had to be read in to the jury.

[28] Sams and Burton did testify for the Crown but only in exchange for immunity from prosecution for numerous serious offences, many arising from a police raid on the Malvern Crew known as Project Impact.

[29] As a result of Project Impact Sams was charged with a lengthy list of offences, including attempted murder, conspiracy to commit an indictable offence, drug dealing, various firearms offences and participating in a criminal organization. He was also facing prosecution for a separate attempted murder charge. He pleaded guilty to the criminal organization charge and was sentenced to time served. All the other charges against him were stayed.

[30] In May 2004, Burton was out on bail for several offences resulting from a police chase, including dangerous driving and drug and weapon offences. He then was arrested in the Project Impact raid and charged with additional offences, including possession of drugs and weapons and participating in a criminal organization. His bail was revoked. Anxious to get out of jail, he agreed to testify against Abbey in exchange for his freedom. Like Sams he pleaded guilty to the criminal organization charge. All other charges against him were withdrawn. So too were the deportation proceedings he was facing. It is hardly surprising that Burton agreed in cross-examination that his arrangement with the Crown was "a dream come true".

[31] The trial judge strongly cautioned the jury – a "*Vetrovec*" caution – about the danger of relying on the evidence of Sams, Burton or Williams without independent confirmation by other evidence. The trial judge emphasized to the jury that each of the three gang members had no compunction about lying or

falsely implicating another to further his own interest or gain an advantage for himself.

(ii) The evidence about the meaning of a teardrop tattoo

[32] The Crown's case therefore rested significantly on the evidence concerning the meaning of a teardrop tattoo. Sams and Burton gave evidence about their understanding of what a teardrop tattoo meant to the wearer. But the source of their evidence was anecdotal – television, movies and "stuff like that". The trial judge told the jury their evidence was unreliable, and had little force without Totten's evidence.

[33] By elimination then, Totten's evidence played a prominent role in the Crown's case. I will review his evidence in detail when I discuss the first issue on appeal, the cogency of the fresh evidence.

[34] In her closing address the Crown relied heavily on Totten's evidence in arguing to the jury that Abbey obtained a teardrop tattoo about four months after Peter was murdered to signify that he believed he had killed a member of the Galloway Boys. The agreed statement of facts filed by the parties gave force to the Crown's argument. The parties stipulated that no Malvern Crew gang member or associate was killed in 2003 or 2004, and that before June 1, 2004 Abbey had not spent time in custody. Also, no direct evidence was led at trial that

Abbey had lost a family member, though Burton testified that when he asked Abbey about his teardrop tattoo Abbey told him he had lost a family member.

[35] The trial judge charged the jury on Totten's evidence. He said "his evidence is of considerable importance in this case". And, although the trial judge cautioned the jury about accepting Totten's evidence, and reviewed details of the defence's attack on its reliability, he told the jury they had to decide what weight to give to the evidence.

[36] Abbey again did not testify at his trial. This time, however, he was convicted of first degree murder.

(d) The *voir dire* in *R. v. Gager*

[37] Gager, too, was charged with murder. The Crown alleged that Gager was a member of a Toronto street gang and that the motive for the murder was a rivalry between his gang and another street gang. At this trial, however, the defence, not the Crown, proposed to call Totten as an expert on street gangs. The defence wanted to show, through Totten's opinion evidence, that Gager did not have the characteristics of a gang member.

[38] The Crown did not concede that Totten was qualified to give expert evidence. Instead, at the beginning of the trial in February 2012, it challenged Totten's qualifications on a *voir dire* into the admissibility of his evidence. And the

Crown's cross-examination revealed weaknesses and discrepancies in Totten's opinions. The Crown's impeachment of Totten on the *voir dire* forms an important part of Abbey's fresh evidence, and indeed was the catalyst for his fresh evidence application. I will address the relevant details about the Crown's cross-examination later in these reasons when I discuss the fresh evidence.

[39] Despite his reservations, the trial judge in *Gager*, Clark J., did qualify Totten to give expert evidence in several areas. In doing so he said that a court should be reluctant to disqualify an expert called by the defence. But in his lengthy ruling Clark J. was quite scathing of Totten and his proposed opinion evidence. For example, he regarded Totten's claim that he is a "Canadian expert on gangs" to signify the "sort of puffery" that suggests "a degree of immodesty on the witness' part that is not in keeping with the detachment and objectivity properly to be expected of an expert witness". He also found Totten's answers to questions about the sample size in his studies "both evasive and troubling". And he found Totten's answers to questions on his methodology also "evasive".

[40] Although Clark J. did qualify Totten to give opinion evidence, the defence, no doubt concerned by the Crown's cross-examination on the *voir dire*, elected not to call him.

(e) Summary of the relevant chronology

[41] The following is a bullet point summary of the relevant chronology and Totten's role:

- 1995-2005: Totten authors six studies, which he relies on for his opinion on the meaning of a teardrop tattoo.
- January 2004: Simeon Peter is murdered.
- 2007: The first Abbey trial is held. The Crown proposes to call Totten to give expert evidence on the meaning of a teardrop tattoo, but the trial judge rules he is not qualified to give that evidence because it is too unreliable. Abbey is acquitted.
- 2009: This court allows the Crown's appeal, sets aside Abbey's acquittal and orders a new trial. The court holds that Totten is qualified to give opinion evidence on the meaning of a teardrop tattoo.
- Winter 2011: The second Abbey trial is held. The Crown calls Totten as its expert witness on the meaning of a teardrop tattoo. Abbey is convicted of first degree murder.
- February 2012: In *R. v. Gager*, an unrelated murder trial, the defence proposes to call Totten as an expert witness on street gangs. The Crown objects to the admissibility of his evidence and cross-examines him on a *voir dire*. The defence then decides not to call Totten.
- February 2017: Abbey's appeal from his conviction is argued.

C. THE LEGAL FRAMEWORK

[42] On this appeal we must apply the test for the admission of fresh evidence on appeal to the test for the admission of expert evidence.

(a) The test for the admission of fresh evidence on appeal

[43] Under s. 683(1) of the *Criminal Code*, R.S.C. 1985, c. C-46, an appellate court has a broad discretion to receive evidence on appeal "where it considers it in the interests of justice" to do so. The burden is on the applicant – here Abbey – to establish that the fresh evidence is admissible.

[44] Although the overriding test for the admission of fresh evidence is "the interests of justice", appellate courts have structured their discretion under this broad standard by prescribing a specific set of criteria to be addressed. The leading Supreme Court of Canada case, decided nearly 40 years ago, is *Palmer v. The Queen*, [1980] 1 S.C.R. 759. A decade ago in *Truscott (Re)*, 2007 ONCA 575, 225 C.C.C. (3d) 321, at para. 92, a five judge panel of this court reformulated the *Palmer* test. In these reasons I will use our court's reformulation. It consists of three criteria, each set out by a question:

> 1. Is the evidence admissible under the operative rules of evidence? (admissibility criterion)
>
> 2. Is the evidence sufficiently cogent in that it could reasonably be expected to have affected the verdict? (cogency criterion)
>
> 3. What is the explanation offered for the failure to adduce the evidence at trial and should that explanation affect the admissibility of the evidence? (due diligence criterion)

[45] The present appeal turns on the second and third criteria – the cogency and due diligence criteria. Except in one respect – the Statistics Canada data –

the first criterion is not at issue. Thus although Clark J.'s ruling on the *voir dire* in *Gager* is obviously not admissible, the relevant portions of the Crown's cross-examination of Totten are admissible under our rules of evidence for the purpose of impeachment. So too are Totten's studies on gangs. The Statistics Canada data are a relatively minor component of Abbey's fresh evidence application, which I will deal with later in these reasons.

(b) The test for the admissibility of expert evidence

[46] The modern Canadian law on the admissibility of expert evidence began with the judgment of Sopinka J. in *R. v. Mohan*, [1994] 2 S.C.R. 9. But in the last two decades since *Mohan* was decided the law on expert evidence has changed significantly. In *Abbey #1* itself – on the Crown's appeal from the acquittal at the first trial – my colleague Doherty J.A. reformulated the *Mohan* test for admissibility to make it easier to apply. And recently in *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23, [2015] 2 S.C.R. 182, Cromwell J. adopted with "minor adjustments" Doherty J.A.'s reformulation of *Mohan*.[2]

[47] The test in *White Burgess* is now the governing test for the admissibility of expert evidence. It adopts a two-stage approach, first suggested in *Abbey #1*: the

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[2] For an excellent summary of the development of the law from *Mohan* to *Abbey #1* to *White Burgess* see Lisa Dufraimont, "Update on Admissibility of Expert Evidence", (paper presented to the Law Society of Upper Canada, Six Minute Criminal Lawyer 2016, April 9, 2016).

first stage focuses on threshold requirements of admissibility; the second stage focuses on the trial judge's discretionary gatekeeper role. Each stage has a specific set of criteria.

[48] The test may be summarized as follows:[3]

Expert evidence is admissible when:

(1) It meets the threshold requirements of admissibility, which are:
   a. The evidence must be logically relevant;
   b. The evidence must be necessary to assist the trier of fact;
   c. The evidence must not be subject to any other exclusionary rule;
   d. The expert must be properly qualified, which includes the requirement that the expert be willing and able to fulfil the expert's duty to the court to provide evidence that is:
      i. Impartial,
      ii. Independent, and
      iii. Unbiased.
   e. For opinions based on novel or contested science or science used for a novel purpose, the underlying science must be reliable for that purpose,

and

(2) The trial judge, in a gatekeeper role, determines that the benefits of admitting the evidence outweigh its potential risks, considering such factors as:
   a. Legal relevance,[4]

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[3] In setting out this test I have largely adopted Lisa Dufraimont's useful summary at (2015), 18 C.R. (7th) 312-313.

b. Necessity,

c. Reliability, and

d. Absence of bias.[5]

[49] In short, if the proposed expert evidence does not meet the threshold requirements for admissibility it is excluded. If it does meet the threshold requirements, the trial judge then has a gatekeeper function. The trial judge must be satisfied that the benefits of admitting the evidence outweigh the costs of its admission. If the trial judge is so satisfied then the expert evidence may be admitted; if the trial judge is not so satisfied the evidence will be excluded even though it has met the threshold requirements.

[50] On this appeal, of the threshold requirements for admissibility, only the fourth criterion – whether Totten is a properly qualified expert – is in issue. It is not in dispute that Totten's expert evidence on gang culture was logically relevant to the key issue in the case, the identity of the shooter; that it was necessary to assist the jury in determining who the shooter was, in the sense that the meaning

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[4] In *Abbey #1*, Doherty J.A. distinguished between the "logical relevance" of the evidence, which is a threshold requirement for admissibility, and "legal relevance", which trial judges must consider in their gatekeeper role. By legally relevant evidence Doherty J.A. means evidence that is sufficiently probative to justify its admission. In *White Burgess*, Cromwell J. referred expressly to logical relevance as a threshold requirement, but only relevance, not legal relevance, at the gatekeeper stage. Nonetheless, as confining relevance to logical relevance at the gatekeeper stage would be redundant, and as Cromwell J. said at para. 22 he would adopt the approach in *Abbey #1* with only "minor adjustments", I conclude that at the gatekeeper stage he meant legal relevance. I acknowledge that my conclusion introduces a small measure of duplication because the reliability of the evidence is a key component of legal relevance and Cromwell J. lists reliability as a separate factor.

[5] At para. 54, Cromwell J. lists these four factors but suggests they are not exhaustive.

of a teardrop tattoo was beyond the knowledge of the jurors; and that it was not subject to any other exclusionary rule. And it is not in dispute that the fifth criterion, as framed, has no application as Totten's opinion was not based on novel science or on a novel scientific theory. See *Abbey #1*, at para. 116.

[51] Of the enumerated factors to be considered at the gatekeeper stage, the three that are applicable are legal relevance, reliability and the absence of bias.

[52] Before leaving the *White Burgess* test for the admissibility of expert evidence, I make three additional points, which I will elaborate on when discussing the fresh evidence.

[53] First, recent case law, including *White Burgess* itself, has emphasized the importance of the trial judge's gatekeeper role. No longer should expert evidence be routinely admitted with only its weight to be determined by the trier of fact. As Cromwell J. said in *White Burgess*, at para. 20, "[t]he unmistakable overall trend of the jurisprudence, however, has been to tighten the admissibility requirements and to enhance the judge's gatekeeping role". Cromwell J.'s observation echoes the point Binnie J. made in the earlier Supreme Court of Canada decision *R. v. J.-L.J.*, 2000 SCC 51, [2000] 2 S.C.R. 600, at para. 28: "The admissibility of the expert evidence should be scrutinized at the time it is proffered, and not allowed too easy an entry on the basis that all of the frailties could go at the end of the day to weight rather than admissibility."

[54] Second, case law since *Mohan* has also emphasized the importance of the reliability of the evidence to its admissibility. See, for example, *R. v. J.-L.J.* and *R. v. Trochym*, 2007 SCC 6, [2007] 1 S.C.R. 239. In *Abbey #1*, at para. 87, Doherty J.A. pointed out that at the gatekeeper stage of admissibility the reliability of the proposed expert evidence is central to its probative value and thus to the benefits of admitting it. And as I will discuss, the unreliability of Totten's opinion evidence on teardrop tattoos, as demonstrated by the fresh evidence, is what disqualifies its admission.

[55] The third and final point is that in *White Burgess*, at para. 45, Cromwell J. resolved a debate in the case law and held that an expert's lack of impartiality and independence and an expert's bias go to the admissibility of the expert's evidence as well as to its weight, if admitted. At the admissibility stage these qualities are relevant to the threshold requirement of a properly qualified expert, and they are again relevant at the gatekeeper stage. Cromwell J., however, did point out at para. 49 of his reasons that rarely will a proposed expert's evidence be ruled inadmissible for failing to meet this threshold requirement.

D. THE ISSUES

1. Is the fresh evidence sufficiently cogent to have disqualified Totten from giving expert evidence about the meaning of a teardrop tattoo?

[56] The cogency criterion for the admission of fresh evidence on appeal asks: is the evidence sufficiently cogent that it could reasonably be expected to have

affected the verdict? In this case that question must be applied to the test for the admission of expert evidence. Because the two are intertwined, I think the analysis is easier to understand if the cogency question is divided into two separate questions:

- Is the fresh evidence sufficiently cogent to have disqualified Totten from giving expert evidence about the meaning of a teardrop tattoo?
- If the answer to the first question is yes, would the absence of Totten's evidence about the meaning of a teardrop tattoo reasonably be expected to have affected the verdict?

[57] As I said at the outset of these reasons, I would answer "yes" to both questions. In this section I will deal with the first question, and in the next section of my reasons with the second question. Before discussing the cogency of the fresh evidence, I will summarize Totten's resume or curriculum vitae, his two reports for Abbey's trials and his evidence at the second trial on the meaning of a teardrop tattoo.

(a) Mark Totten's curriculum vitae

[58] On paper Totten has a most impressive curriculum vitae. It spans 28 pages of the appeal book. He has a B.A. in Social Behaviour from Queen's University (1985), a Masters of Social Work from Carleton University (1986) and a PhD in Sociology, concentrating on youth gangs and violence, also from

Carleton University (1996). Since 1997 he has been president of his own consulting company, Totten and Associates.

[59] Totten has published four books, delivered numerous reports to governments and community organizations and received a large number of research and evaluation grants. According to his curriculum vitae, since 1990 he has delivered over 500 keynote speeches, addresses, lectures, papers and workshops for international, national and local audiences on topics related to, among others, youth gangs, youth violence and youth homicides.

(b) Totten's two reports for Abbey's trials

[60] Before the first trial, Totten delivered two reports. The first is dated December 8, 2006 and is titled "Street Gangs and the Significance of the Teardrop Tattoo". The second is dated January 3, 2007 and is titled "Street Gang Research Methodology and Implications for R. v. Abbey". The Crown relied on these two reports for the second Abbey trial. Totten did not produce a separate or supplementary report for the second trial.

[61] Totten's first report is relatively brief and it includes no statistical data on teardrop tattoos. Totten, however, does say in this report that "[i]t is common for *young recruits* to get teardrop tattoos to display that they have passed the test of murdering a rival gang member" (emphasis in original). And he concludes his report with the following opinion: "it is clear to me that Warren Abbey's teardrop

tattoo on his right cheek below the eye represents the fact that he killed a rival gang member, most likely in 2004".

[62] Totten's second report is lengthier and more detailed. In it he discusses his research methods and interview techniques. And he focuses on the meaning of a teardrop tattoo to a gang member, and the statistical data generated by his six studies, which he relies on for his opinion. The meanings Totten ascribes to a teardrop tattoo and his statistical data were replicated in his evidence at trial, to which I now turn.

(c) Totten's evidence at the second trial

[63] In the light of this court's 2009 judgment, the trial judge qualified Totten, without objection from the defence, to give expert opinion evidence for the Crown "in relation to street gang culture and symbology … in particular with respect to the interpretation of tattoos and more particularly the teardrop tattoo." In giving his opinion Totten said he relied on his clinical experience over two decades, his research projects, and his review of the academic literature.

[64] His opinion on the meaning of a teardrop tattoo had two branches: a qualitative branch and a quantitative branch. The fresh evidence challenges the quantitative branch, not the qualitative branch. But the two branches are intertwined.

[65] First, the qualitative branch. Totten testified that a teardrop tattoo on the face of a young member of a street gang means one of three things:

- The death of a family member of the wearer of the tattoo or of a fellow gang member;
- The wearer of the tattoo had served time in a correctional facility, usually ten years or more; or
- The wearer of the tattoo had murdered a rival gang member. Totten also said if this was the reason for the tattoo, typically the wearer would obtain it within six months of the homicide.

[66] Second, the quantitative branch of Totten's opinion. Totten's evidence was that between 1995 and 2005 he conducted six studies on young gang members. The six studies yielded the following dramatic statistics:

- Totten studied a total of 290 young gang members;
- Of the 290, 97 gang members had been convicted of a homicide, either murder or manslaughter;
- Of the 97, 71 male gang members had teardrop tattoos; and
- Each of the 71 told Totten he had obtained a teardrop tattoo to signify he had killed a rival gang member.

In his evidence at trial Totten gave no breakdown of the number of homicides or teardrop tattoos attributable to each study.

[67] That Totten's statistics are based on his six studies is critical to my assessment of the cogency of the fresh evidence. The six studies in chronological order are the following:

- Youth Services Bureau ("YSB") Survey (May 1999): a one-month study to get a snapshot of the youth who were living on the street in Ottawa;
- Guys, Gangs and Girlfriend Abuse (2000): an 18-month study of various forms of physical and sexual violence against women;
- Understanding Serious Youth Violence (2001): a three-month study to investigate various forms of extreme violence;
- When Children Kill (2002): a study into the lives of 19 young persons convicted of murder or manslaughter;
- Youth Literacy and Violence Prevention Research Project (2003): a study of the literacy level of young people engaging in violence; and
- The Gays in the Gang (2005): a report on the experiences of young gay, bisexual and transgender gang members who engaged in serious street violence.

[68] The ages of the subjects studied ranged between 12 and 20. Most were male, but in a couple of the studies some of the subjects were female. None of the studies was geared toward the study of tattoos.

(d) The fresh evidence

(i) Introduction

[69] Abbey has filed as fresh evidence relevant portions of the Crown's cross-examination of Totten in *Gager*, Totten's research studies and a small amount of

Statistics Canada data. The purpose of the fresh evidence is to impeach the credibility and reliability of Totten's statistical evidence, which was a critical component of his opinion on the meaning of a teardrop tattoo. The fresh evidence seeks to demonstrate that Totten's opinion is replete with weaknesses, misrepresentations and even falsehoods.

[70] Specifically, the fresh evidence mainly seeks to undermine the four key numbers that Totten said came from his six research studies and which he relied on for his opinion: 290 gang members; 97 convicted of a homicide; 71 wore a teardrop tattoo; all 71 obtained a teardrop tattoo to signify the killing of a rival gang member. In addition, the fresh evidence seeks to show duplication in Totten's studies, contrary to his sworn evidence in *Gager*, and misrepresentations in how he conducted his interviews.

[71] The Crown has not disputed any of Abbey's fresh evidence, other than to contend that the Statistic Canada data are inadmissible because they are hearsay. The Crown has not filed any reply material. And neither side sought leave to call Totten to give evidence on the fresh evidence application. Thus for the purpose of this appeal I treat as unchallenged any problems with the reliability of Totten's opinion revealed by the fresh evidence.

(ii) 290 gang members

[72] Totten testified that the total number of gang members in his six research studies was 290, broken down as follows:

- YSB Survey: 51
- Guys, Gangs and Girlfriend Abuse: 90
- Understanding Serious Youth Violence: 31
- When Children Kill: 9
- Youth Literacy and Violence Prevention Research Project: 84
- The Gays in the Gang: 25

[73] Abbey challenges the figure of 90 gang members said to be between 13 and 17 years of age in what was Totten's biggest study up to the time of trial and also his doctoral dissertation: Guys, Gangs and Girlfriend Abuse. Abbey submits that 90 is a misrepresentation and that a review of the study shows that the accurate figure is 22, thus reducing Totten's sample size from 290 to 222. I agree with Abbey's submission.

[74] In *Gager*, Totten was extensively cross-examined on his use of the figure of 90. He gave two explanations, neither of which I find convincing.

[75] His first explanation was that the figure of 90 gang members reflected a continuum of gang involvement. Some were hard core gang members and others

"belong[ed] to anti-social peer groups where violence was common". In this study (at p. 58) Totten does refer to "a continuum of male peer groups/gangs, spanning from 'groups of friends' to 'hard-core criminal gangs'".

[76] But Totten produced two charts (at pp. 59 and 60), one distinguishing between "abusers" and "non-abusers", and the other characterizing abusive behaviour in various situations, for example living at home or in school. In each chart Totten identifies among the 90 participants the number of "gang members". That number is 22. And in his chart distinguishing between abusers and non-abusers, only 60 participants are said to be abusers. For the 90 participants to be gang members, as Totten claimed in his evidence, all 30 non-abusers would have to be considered gang members. That would be surprising, and in my view, highly unlikely.

[77] Totten does not define "gang member" in his study but in his charts he considered that only 22 qualified. And on any reasonable definition of a gang member it is not realistic to think people in a "group of friends" would be classified as gang members. Further, in his report in *Gager* Totten defines street gangs as "visible, hardcore groups that come together for profit-driven criminal activity and severe violence." That definition obviously restricts the number of gang members in his study to 22.

[78] That 22 is the correct figure is also evident later in Totten's study. Of the 90 participants he singled out 30 for in depth interviews. He has a chart (at p. 166) dividing the 30 into "gang members" and "peer group members". Only 17 of the 30 are classified as gang members, again showing that the figure of 90 is an inflated figure.

[79] Totten's second explanation for using the figure 90 was even less convincing: it was nonsensical. Totten claimed that his definition of gang member had changed over time. It was broader when he did the study than when it was 12 years later when he testified in *Gager*. But, of course, on that explanation there should be even fewer gang members now, not more. Even the Crown fairly conceded that Totten's explanation "didn't make sense".

[80] Totten also misrepresented his sample size of gang members in one of two more recent studies, produced after the second trial in this case but before the *voir dire* in *Gager*. The two studies – one in Prince Albert and the other in Regina, Saskatchewan – looked at aboriginal gangs, not conventional street gangs. According to Totten's evidence in *Gager* these two studies added 229 additional gang members to his overall sample size – 151 in the Prince Albert study and 78 in the Regina study – for a total sample size of 519 gang members. But a review of the Prince Albert study shows that the figure of 151 is inflated,

and indeed false. The study itself states that only 49 percent of the 151, or about 72 participants, were current or recent gang members.

[81] Sample size is obviously important to Totten. In his second report for the first trial he claimed that his sample size of 290 street gang members was "considerably larger" than the sample size in any existing gang study,[6] and was large enough that his results could be "generalized" to other parts of Canada. In his report for *Gager* he claimed that his sample size of 519 was "many times larger" than the sample size used in previous Canadian studies. And, sample size is indeed important. The larger the sample the more significant the results derived from the data and the more confidence we can have in the inferences sought to be drawn from those results.

[82] But inflating his sample size as Totten has done by misrepresenting the number of gang members casts a dark cloud over the reliability of his statistical evidence. The number of gang members in his study of Guys, Gangs and Girlfriend Abuse is 22 not 90, and his accurate total sample size is 222, not 290. The reduction in Totten's sample size likely affects, to an extent unknown, the numbers derived from it – 97 who committed a homicide, 71 of which had a teardrop tattoo.

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[6] The report states that the sample size was 300 gang members. In his testimony in *Gager*, Totten clarified that 300 was a typographical error and the correct number is 290.

(iii) 97 gang members were convicted of a homicide[7]

[83] Totten claimed that of his sample size of 290 gang members, 97, fully one third, were convicted of homicide, either murder or manslaughter. Leaving aside that the sample size should be 222 not 290, I find it impossible to discern how Totten arrived at the figure of 97 or any number close to it from his six studies. The number may be correct but it cannot be found in the six studies.

[84] The only study that expressly addresses homicides is When Children Kill, a small study of 19 children. All 19 killed another person but at most nine out of the 19 were gang members and none of the nine killed a rival gang member. At best one can assume nine gang members could have contributed to the 97 who committed a homicide. But none of the nine could have contributed to the 71 who obtained a teardrop tattoo to signify the killing of a rival gang member.

[85] Very few individuals interviewed in Totten's five other studies were convicted of homicide. The details are as follows:

- The YSB May 1999 Youth Survey focused on the living circumstances of clients of the Ottawa Youth Services Bureau over the course of one month, April 1999. Of the 309 participants Totten identified 51 as gang members. According to Totten, 82 of the 309 participants committed a major physical assault. Homicide is not mentioned. And nowhere in the report does Totten suggest that any of the 51 gang members committed a murder or manslaughter;

[7] Totten was not clear whether all 97 were male or whether some were female.

- In Guys, Gangs and Girlfriend Abuse, none of the gang members studied was reported to have been convicted of a homicide. The study looked at abuse towards girlfriends. Totten defined physical abuse as an assault, aggravated assault, assault with a weapon or assault causing bodily harm. His definition does not include murder or manslaughter. The gang members studied were abusive to their girlfriends but none had killed a girlfriend, let alone a rival gang member;

- The Gays in the Gang was a study of 25 gay, bisexual and transgender gang members between ages 14 and 20. All 25 had committed extreme acts of violence, which could include murder. But only eight of the 25 were interviewed at a correctional facility. So, likely at most, the study could contribute less than ten to the figure of 97;

- In the first Abbey trial Totten admitted that none of the participants in the Understanding Serious Youth Violence study had been convicted of a homicide; and

- In the Youth Literacy and Violence Prevention Research Report, 84 participants with an average age of 17.7 years self-identified as gang members. None of the 84 was said to have been convicted of a homicide.

[86] In summary, only in the two studies When Children Kill and The Gays in the Gang did Totten specify that some of the gang members had committed a homicide. But the number who did was relatively small, less than ten in each study. The total of less than twenty falls far short of the 97 Totten claimed in his evidence.

[87] Abbey filed Statistics Canada data as part of his fresh evidence application to support his argument that the figure of 97 is false. The Crown objected to the admissibility of these data on the ground that they were simply appended to an affidavit of an assistant to counsel on appeal, Mr. Harris, and thus were hearsay.

[88] In my opinion, the Statistics Canada data are admissible in the form in which they were filed under the common law public documents exception to the rule against hearsay. See *R. v. P.(A.)* (1996), 109 C.C.C. (3d) 385 (C.A.).[8] Although the Statistics Canada data are admissible, I do not find them helpful. They do not distinguish between when a person committed a homicide or was charged or convicted of a homicide, and therefore cannot be compared to Totten's data.

[89] Even without the Statistics Canada data the number of 97 is not supported by the written studies Totten authored. Neither that number nor any number close to it is disclosed by the six studies he claimed to have relied on. For that

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[8] Under this exception four requirements must be met for the document to be admissible without proof:

- The document must be made by a public official;
- The public official must have made the document in discharging a public duty or function;
- The document must have been made with the intention that it be a permanent record; and
- The document must be available for public inspection.

The rationale for the exception is that we presume the accuracy of the public document because we assume public officials will act in accordance with their duty. Also requiring public officials to testify routinely about public documents would cause considerable inconvenience.

The Statistics Canada data meet the four requirements for the public documents exception to the rule against hearsay. Section 3(e) of the *Statistics Act*, R.S.C. 1985, c. S-19 requires Statistics Canada to "promote and develop integrated social and economic statistics pertaining to the whole of Canada and to each of the provinces". Section 26 requires the courts to furnish criminal statistics to the government. Presumably these statistics create a permanent record. And the statistics are publicly accessible on the internet.

reason whether 97 young gang members in his studies were convicted of a homicide cannot be assessed or verified.

(iv) 71 males of the 97 gang members convicted of a homicide had a teardrop tattoo

[90] Totten claimed that, of the 97 gang members in his studies who were convicted of murder or manslaughter, 71 males obtained a teardrop tattoo. This claim is even more troubling, even assuming the accuracy of the figure of 97. Not a single study lists the number of gang members who had a teardrop tattoo. Indeed, the texts of the six studies contain only a few references to tattoos and no reference at all to teardrop tattoos.

[91] Nonetheless, Totten testified at the *Gager voir dire* that all six studies asked questions about tattoos. But the studies say otherwise. Here is what each study says about tattoos and questions on tattoos:

- The YSB May 1999 Youth Survey does not list what questions were asked of the participants and contains no discussion of tattoos;
- Appendices A and B of the Guys, Gangs and Girlfriends Abuse study list the questions asked of each participant. The questionnaire is detailed: 40 initial screening questions followed by in depth interview questions. Yet the questionnaire does not include a single question about tattoos. And the study itself, including the various charts, does not discuss or refer to tattoos. The absence of questions about tattoos and references to them in the study is hardly surprising. The purpose of the study was to explore how male youth made sense of their abusive behaviour towards their girlfriends;

- In Understanding Serious Youth Violence, question 6 of the interview questions asks: “Do you have any tattoos? Can you show me? What does/do the tattoo(s) mean to you?” Question 7 asks: “How do you communicate with gang members … Probe for … tattoo.” The report has a section on case studies and several of the subjects discuss their tattoos. But the report contains no discussion of teardrop tattoos;

- Appendix A in When Children Kill lists the questions asked of the 19 participants. None of the questions asks about tattoos. The book itself does contain a few references to tattoos but none to teardrop tattoos;

- Appendix A in the Youth Literacy and Violence Prevention Research report lists the questions to be asked to the participants and the list does include questions on tattoos. Question 18 asks: “Can you tell me how gang members communicate with each other in your gang? With rival gang members? With other people? Probe for details around … tattoos.” Question 19 asks: “Do you have any tattoos? Can you show them to me?” Question 20 asks: “What does the tattoo mean to you (probe for each tattoo)?” But again the report contains no discussion of teardrop tattoos; and

- The Gays in the Gang study does not list the questions asked to the participants. In the body of the study Totten says questions about tattooing were included in the study, and indeed the study does discuss the tattoos of a few of the participants. But once again the study has no discussion of teardrop tattoos.

[92] In summary, in two of the six studies questions about tattoos were listed; in two they were not; and two were silent about the questions asked. And no study contained any discussion of or reference to teardrop tattoos, or a list of how many participants had them. Totten said it was not unusual that his studies failed to include questions on tattoos. But again his evidence cannot be verified by a review of the studies.

[93] In his 2009 judgment in *Abbey #1*, at para. 119, Doherty J.A. suggested that in assessing the reliability of an expert's opinion that relies on data collected through various means such as interviews – as Totten's opinion does – one important question to ask is whether the data are accurately recorded, stored and available. In *Gager* the Crown asked Totten essentially this very question.

[94] The Crown asked Totten for a breakdown of the number of tattoos, including teardrop tattoos, in each study, for a list of the 71 male gang members who had a teardrop tattoo and for the raw data supporting her request. Totten said he did not have the data with him. However, Totten told the Crown he had "masses of data" at home, and had collected and maintained his data on teardrop tattoos. He testified: "I can give you the numbers with teardrops, with the teardrop tattoo out of those six studies". He promised to get the data and bring them to court.

[95] Surprisingly, after the luncheon recess, Totten did an about-face. He told the Crown and the trial judge he had no data on teardrop tattoos as he had destroyed all of his data in accordance with the guidelines of the "tri-council ethics committee". Totten said that under these guidelines he was bound to keep his raw data for 10 years, and then destroy them. Totten was not asked and did not say when he destroyed his data, and he did not produce a copy of the committee's guidelines.

[96] The Crown argues that we cannot rely on Totten's evidence about the destruction of his data because that issue arose for the first time in the *Gager* trial. In Abbey's first trial, the defence made no complaint about the lack of disclosure. I do not agree with the Crown's argument. The *Gager* trial took place about eleven months after Abbey's second trial, and it is thus likely that the state of Totten's raw data was the same at the time of both trials. Indeed if we accept Totten's evidence that he destroys his data after ten years most of the data from his studies would have been destroyed before the second trial. Neither the Crown nor Totten has suggested otherwise.

[97] More important, Totten's evidence raises serious concerns about his credibility and the reliability of his assertion that 71 of the 97 gang members had teardrop tattoos. The concerns are twofold. First, Totten's over-lunch about-face regarding whether he had his data is, at least, suspicious. Second, without access to the underlying data a court cannot test the reliability of Totten's claim that in his sample drawn from his six studies, 71 young male gang members who had been convicted of a homicide had a teardrop tattoo.

(v) Each of the 71 told Totten he had obtained a teardrop tattoo to signify the killing of a rival gang member

[98] At trial the Crown asked Totten the following question:

> I just want to be certain I understand. So the 71 who had been convicted of murder or manslaughter that had a teardrop tattoo all indicated, told you, when you

> asked, that the teardrop signified killing of a rival gang member; is that right?

[99] Totten answered: "That's right". His answer undoubtedly was one of the most powerful pieces of evidence, if not the most powerful piece of evidence, supporting the Crown's allegation that Abbey had murdered Peter. Yet on its face the answer seems implausible. Totten had testified that a young gang member would get a teardrop tattoo for one of three reasons. But according to his evidence not a single gang member among the 71 obtained a teardrop tattoo to signify the loss of a family member or fellow gang member, or to signify having been in a correctional facility. The implausibility of Totten's answer raises a concern about whether he had become a partisan advocate for the Crown, instead of an objective and impartial expert witness.

[100] Even more significant, Totten's assertion that all 71 obtained a teardrop tattoo to signify the killing of a rival gang member cannot be tested or verified. All six of his studies are silent – none contains even a single reference to a teardrop tattoo, let alone the number of gang members who had one. In at least two of his studies the listed interview questions do not include a question on tattoos. Moreover, the figure from which the 71 is drawn, 97 who were convicted of a homicide, is itself suspect. And Totten claims to no longer have the raw data that could support his assertion.

(vi) Duplication

[101] In *Gager*, Totten was asked: "Is there any duplication between the participants in any of these studies? Did you ever use gang members more than once in different studies?" He replied: "Never". His reply was false.

[102] At least three participants were used in both Guys, Gangs and Girlfriend Abuse (2000) and The Gays in the Gang (2005). Their names are Bob, Phil and Brian. Identical quotes from these three participants are found in the interview summaries in both studies.

[103] Other aspects of this duplication are even more concerning. Totten said that the primary research for Guys, Gangs and Girlfriend Abuse was done in 1993-4, and the interviews for The Gays in the Gang was done ten years later in 2004. Despite the ten-year gap the verbatim quotes attributed to Bob, Phil and Brian are identical in the two studies, as is the age of each one. In the first study, Guys, Gangs and Girlfriend Abuse, none of the three are overtly said to be gay (although there are suggestions that Bob and Phil are questioning their sexuality); in the second study The Gays in the Gang, all three are said to be gay.

[104] The amount of duplication uncovered by the fresh evidence is small. But that it exists at all, contrary to Totten's sworn testimony, raises further concerns

about the credibility and reliability of his opinion evidence. Indeed, the duplication raises a legitimate concern that Totten's interview summaries are fabrications.

(vii) Interview discrepancies

[105] Totten's YSB May 1999 Youth Survey, a one-month study of the living circumstances and behaviour of Ottawa youth who were clients of the Youth Services Bureau, included interviews of 309 participants. The survey itself says that over one half of the interview questionnaire was completed by the young person "alone" and the remainder by the young person together with one of Totten's staff.

[106] In his evidence at trial, however, Totten claimed that he was present for all the interviews and that each interview was at least one hour long. By the time he testified at the *Gager voir dire* each interview had become one to three hours long. He backtracked somewhat in his re-examination in *Gager*, and admitted some of the interviews were done by the staff and some were short. But he maintained that he was present at every interview. As Clark J. aptly commented at para. 54 of his ruling:

> Allowing time for sleep and other necessary daily activities, inasmuch as there are only 744 hours in the month of May, even using the lower figure of one hour for each interview simple arithmetic makes it difficult to accept that he could have performed that number of interviews in that time frame.

(e) Positions of the parties and analysis

[107] This first and central issue on the appeal turns on the degree of cogency of the fresh evidence. Abbey submits it is so cogent that if known by the trial judge it would have been sufficient to disqualify Totten from testifying before the jury about the meaning of a teardrop tattoo. Abbey contends the fresh evidence shows that Totten's opinion evidence was largely fabricated or concocted, or at the very least was not supported by the studies he claims he relied on. Thus he was a biased witness – he was not fair, objective and non-partisan; or his evidence was of dubious reliability. On either basis, the fresh evidence demonstrates his evidence should not have been heard by the jury.

[108] The Crown acknowledges that the fresh evidence has demonstrated what he categorizes as "irregularities" in Totten's testimony. But the Crown submits these irregularities are not so cogent that they would have prevented Totten from testifying; at most, they might affect the weight the jury would give to his evidence. The Crown contends that the fresh evidence does not call into question the heart of Totten's opinion, that the teardrop tattoo on a young gang member can mean only one of three things, one of which is the killing of a rival gang member. Moreover the Crown says this court cannot make a finding that Totten concocted his evidence because he was not given an opportunity either in *Gager* or on this appeal to explain much of the fresh evidence Abbey now relies on.

[109] I agree with Abbey's submission that the fresh evidence is sufficiently cogent that if it had been put before the trial judge he would have ruled Totten's opinion evidence about the meaning of a teardrop tattoo inadmissible. However, even though the fresh evidence does raise concerns about whether Totten was a fair and objective witness, I do not think it establishes a case of bias. Even with the fresh evidence I am satisfied that Totten's expert evidence would meet the threshold requirements for admissibility at the first stage of the *White Burgess* test. Cromwell J. noted in *White Burgess* that only in a rare case will expert evidence fail to meet the threshold requirement of being impartial and unbiased. This is not one of those rare cases. Nor do I think this is a case where Totten's evidence would be rendered inadmissible at the second gatekeeper stage because of bias.

[110] And I agree with the Crown's contention to the extent that on this record I would not conclude Totten had concocted his evidence. It would not be fair to Totten to make that finding when he has had no opportunity to explain or meet some of the fresh evidence put against him. But I do not think it is necessary to go as far as finding fabrication or concoction to render Totten's opinion evidence inadmissible.

[111] The fundamental problem with Totten's trial evidence, which was brought to light by the fresh evidence, is its reliability, or more accurately its unreliability. If the trial judge had known about the fresh evidence, then at the gatekeeper stage

he would have exercised his discretion and ruled that Totten's evidence could not go to the jury because of its unreliability.

[112] A trial judge's gatekeeper role is crucial in ensuring that expert evidence is sufficiently reliable to be admitted into evidence. Under the test in *White Burgess* for the admissibility of expert evidence, "reliability" is an express factor the trial judge must consider at the gatekeeper stage; and reliability is a key component of the evidence's probative value and thus of another express factor, "legal relevance".

[113] The focus on the reliability of expert evidence at the gatekeeper stage was also a theme in the important report of the *Inquiry into Pediatric Forensic Pathology in Ontario* (Toronto: Ontario Ministry of the Attorney General, 2008) authored by our former colleague Stephen Goudge. He observed at vol. 3, p. 470: "The evidence at this Inquiry demonstrated that the legal system is vulnerable to unreliable expert evidence, especially when it is presented by someone with [the expert's] demeanour and reputation". And so he emphasized at pp. 478-479 that the gatekeeper must keep unreliable evidence from being heard by the trier of fact. To repeat what Binnie J. said in *R. v. J.-L.J.*, at para. 28: "In the course of *Mohan* and other judgments, the Court has emphasized that the trial judge should take seriously the role of 'gatekeeper'".

[114] The trial judge as gatekeeper is engaged in a cost-benefit analysis. That analysis is applied to many areas of the law of evidence, not just the law governing the admissibility of expert evidence. For expert evidence, the trial judge must decide whether opinion evidence that meets the threshold requirements of admissibility should still be ruled inadmissible because the potential harms to the trial process from admitting it outweigh its potential benefits. Put the other way around and in familiar terms, the trial judge must decide whether the probative value of the expert evidence outweighs its potential prejudice: see *R. v. Bingley*, 2017 SCC 12, 345 C.C.C. (3d) 306, at para. 6, and *Abbey #1*, at paras. 76-79.

[115] Expert evidence of dubious or questionable reliability has little probative value, and offers little benefit to the trial process. At the same time, evidence of questionable reliability risks distorting and prejudicing the fact-finding process: see *Mohan*, at p. 21.

[116] Many criteria may bear on the reliability of expert evidence. Doherty J.A. has a useful list of criteria in *Abbey #1*, at para. 119. The Goudge Report at p. 488 has a similar list. Neither list is said to be exhaustive. On this appeal two criteria bearing on the reliability of Totten's expert opinion on teardrop tattoos are particularly pertinent:

- The opinion must accurately represent the data and studies on which it is based; and

- When the opinion is based on data obtained through interviews, the data must be accurately recorded in the studies on which the opinion is based, and must be available so that they may be examined and verified by the court.

In the light of the fresh evidence, Totten's expert opinion fails to meet either of these criteria.

[117] First, Totten's opinion evidence at trial misrepresented the data in his studies. The most serious misrepresentation was the size of his sample. Totten claimed the total sample size in his six studies was 290 gang members. He inflated the number in his evidence, likely to try to demonstrate his sample size was the largest of any Canadian study on gangs. The accurate number is at most 222, a significant reduction. This reduction calls into question Totten's other figures, such as the 97 who committed a homicide and the 71 who wore a teardrop tattoo. Other misrepresentations, which I have reviewed, are Totten's claim he never used a gang member more than once in his studies and his claim to have sat through every interview in at least one of his studies.

[118] Second, however, and in my view more important, the key statistical components of Totten's opinion evidence on the meaning of a teardrop tattoo are not supported by the six studies on which his opinion evidence is based. And, the underlying interview data, which Totten claims support his opinion evidence, are no longer available for the court's examination because he said he destroyed them.

[119] In his article on the Goudge Report, "Taking a 'Goudge' out of Bluster and Blarney: An 'Evidence-Based Approach' to Expert Testimony" (2009) 13 Can. Crim. L. Rev. 135, Professor David Paciocco, now Paciocco J.A. of this court, aptly commented that courts now take what he called, and what the Goudge Report called, an evidence-based approach to the evaluation of the reliability of expert evidence. He wrote at p. 146: "In effect, the 'trust me' approach, once typical in Canadian courts, has been replaced by a 'persuade me' standard". And near the end of his article, at p. 155, in words directly relevant to the reliability of Totten's opinion evidence, he wrote: "…the essence of an evidence-based approach is that the tribunal be given all of the data it needs to assess the opinion it is being asked to accept. Anything less and a 'trust me' approach is used."

[120] Totten's opinion evidence asks us to trust him. He asked us to trust him that:

- In his six studies a total of 97 gang members were convicted of a homicide, even though the studies report less than 20;
- All gang members in his six studies were asked questions about tattoos, even though only two of the studies specified questions about tattoos;
- 71 male gang members in his six studies obtained a teardrop tattoo, even though none of the studies lists or even refers to a gang member wearing a teardrop tattoo, and the underlying interview data are not available; and

- All 71 male gang members obtained a teardrop tattoo to signify the killing of a rival gang member, even though none of the studies refer to the number of gang members with a teardrop tattoo, let alone each gang member's purpose in getting one, and again the underlying interview data to verify Totten's evidence are not available.

[121] The fresh evidence, in my view, shows that Totten's evidence is too unreliable to go to a jury. Because of its unreliability, its probative value and its benefit to the trial process would be minimal at best, and the prejudice and harm from admitting it would be great both because it would consume too much valuable court time and because the jury would likely be unable to effectively and critically assess the evidence. In short, the fresh evidence is so cogent that if known by the trial judge at the gatekeeper stage he would have ruled Totten's evidence on the meaning of a teardrop tattoo inadmissible.

[122] The Crown is correct that the fresh evidence does not challenge the qualitative branch of Totten's opinion – the teardrop tattoo on a young gang member could mean one of three things and one of those meanings is to signify the killing of a rival gang member. But that distinction does not help the Crown. The qualitative branch of Totten's opinion is inseparable from the quantitative branch of his opinion. The quantitative branch gives the qualitative branch the veneer of being grounded in powerful scientific data, and thus the appearance of being objectively reliable. The fresh evidence all but washes away that veneer, and with it the reliability of Totten's opinion.

[123] The Crown is also correct that on the *voir dire* in *Gager* Totten was not confronted with a good deal of the fresh evidence. And on this appeal Totten was not asked to explain any of the deficiencies and inaccuracies in his evidence and research. But the absence of any explanation from Totten cannot assist the Crown in its objection to the admissibility of the fresh evidence. The Crown did not seek leave to call Totten on the fresh evidence application. Nor did the Crown offer evidence that might explain these flaws in Totten's testimony and research revealed by the fresh evidence. These flaws remain unchallenged.

[124] Still, as Totten has not been directly confronted with some of these deficiencies and inaccuracies in his testimony and research I think it would be unfair to make the positive finding that Abbey urges us to make: Totten fabricated or concocted part of his research, or gave deliberately misleading testimony. But when assessing the reliability of Totten's opinion, I see nothing unfair in taking into account that the many serious problems in both Totten's evidence and research, which were identified by the fresh evidence, remain entirely unexplained.

[125] I conclude that the fresh evidence was sufficiently cogent that if it had been known by the trial judge, Totten's opinion evidence on the meaning of a teardrop tattoo would have been held inadmissible.

2. Would the absence of Totten's evidence about the meaning of a teardrop tattoo reasonably be expected to have affected the verdict?

[126] The Crown submits that the fresh evidence should not give this court strong reason to doubt the accuracy of the verdict against Abbey. That submission might have merit if the fresh evidence only diminished the weight the jury might give to Totten's evidence. But I have concluded the fresh evidence is sufficiently cogent that if known by the trial judge Totten's proposed expert testimony would have been ruled inadmissible. And in my view, if the Crown had been precluded from leading Totten's evidence about the meaning of a teardrop tattoo it could reasonably be expected the verdict would have been different. I say this for four reasons.

[127] The first and most obvious reason is the different results of the two trials. At the first trial, the trial judge ruled that the Crown could not lead Totten's evidence and Abbey was acquitted. At the second trial, the Crown did lead Totten's evidence about the meaning of a teardrop tattoo and Abbey was convicted.

[128] Second, the rest of the Crown's case against Abbey – which I summarized earlier in these reasons – was not overly strong. The eyewitness identification evidence was inconclusive, as was the footprint impression evidence and the cellphone tower evidence. Each of the three Malvern Crew members, Sams, Burton and Williams, did testify about their understanding of the meaning of the

teardrop tattoo, and each implicated Abbey in the murder. But their evidence was problematic. Their understanding of the meaning of a teardrop tattoo came from movies and the like, so the trial judge appropriately instructed the jury it was unreliable. Their evidence implicating Abbey in the murder was severely compromised by its inconsistencies; by each of their unsavoury pasts; in the case of Sams and Burton by the highly beneficial deals each made with the Crown in exchange for his testimony; and in the case of Williams by his refusal to testify at the second trial.

[129] Third, Totten's evidence implicating Abbey would likely have significantly influenced the jury. Totten had extensive and impressive academic, research and clinical credentials. He claimed to have special access to the secret world of street gangs and gang symbology, realms almost certainly foreign to the members of the jury. And one aspect of his evidence was especially compelling: although a teardrop tattoo could have one of three meanings in his six studies all 71 gang members who had a teardrop tattoo and had been convicted of a homicide told Totten he obtained the teardrop tattoo to signify the killing of a rival gang member. For the Crown that evidence could not be improved on.

[130] Finally, in her closing address to the jury the Crown relied on Totten's evidence. She argued:

> All of those 71, who had been convicted of murder or manslaughter and had a teardrop tattoo, said that the

> tattoo signified the killing … His [Totten's] opinion rested, in part, on the explanation given for the teardrop tattoo by all 71 of the interviewed gang members who had both tattoos and had been convicted of murder or homicide related offence. Their responses linking their teardrop tattoos with the murders of rival gang members could not have been motivated by a desire to avoid criminal liability or responsibility because they had already been convicted.

[131] And, after excluding the other two possible meanings of a teardrop tattoo, the Crown concluded this portion of her closing address by stating that Abbey had obtained a teardrop tattoo for only one reason: he believed he had killed a member of the Galloway Boys.

[132] The absence of Totten's evidence would therefore reasonably be expected to have affected the verdict at trial.

3. Does the defence's failure to adduce the fresh evidence at trial affect its admissibility on appeal?

[133] Once a party meets the first two criteria for the admissibility of fresh evidence on appeal – as Abbey has done – the court must still consider the third criterion, the due diligence criterion. The court asks whether an explanation has been offered for the failure to address the evidence at trial and whether any explanation offered affects the admissibility of the evidence on appeal.

[134] The question is important because the "interests of justice" include not just Abbey's interests but the public interest in preserving and promoting the integrity of the trial process. Even fresh evidence that could be expected to have affected

the verdict can be ruled inadmissible if no satisfactory explanation is given for not leading it at trial. On the other hand, fresh evidence may be so cogent that it should be admitted on appeal even without a satisfactory explanation for not adducing it at trial: see *Truscott (Re)*, at paras. 101-102.

[135] Here, Abbey offers no explanation for the defence's failure to adduce the fresh evidence at either trial. Instead, Abbey submits simply the fresh evidence is so cogent that not to admit it may result in a miscarriage of justice.

[136] The Crown acknowledges that the due diligence criterion will yield where its "rigid application" may result in a miscarriage of justice. Thus the Crown accepts that were we to hold that the fresh evidence showed Totten had concocted his trial testimony, we should admit the fresh evidence even absent due diligence. But I have not concluded that Totten concocted his evidence. And I take the Crown's submission to be that without a conclusion of concoction the absence of due diligence and the importance of "finality" in our criminal justice system weigh in favour of dismissing Abbey's application to introduce fresh evidence.

[137] The Crown points to a number of considerations in support of its submission:

- Almost all of the fresh evidence is not "fresh" in the sense that most of the information the Crown relied on to cross-examine Totten on the *voir dire* in *Gager* was available to Abbey's defence counsel even before the first trial;

- The defence has never complained about disclosure from the Crown or that it was denied any material it had requested;

- On appeal Abbey makes no claim of ineffective assistance of trial counsel, yet offers no explanation for the failure to adduce this evidence at either trial;

- To the contrary, defence counsel at trial made a strategic and tactical decision to cross-examine Totten in a particular way. Unlike the cross-examination of Totten in *Gager*, which was before a judge alone, defence counsel's cross-examination of Totten in this case was before a jury. Defence counsel was legitimately concerned about getting bogged down in numbers before the jury. So in his closing address he told the jury: "I don't want to put everyone to sleep … I tend to get baffled by statistics …";

- Defence counsel's approach to cross-examining Totten yielded a number of useful concessions, some of which defence counsel relied on in his closing address and some of which the trial judge pointed out in his charge to the jury; and

- Defence counsel knew from before the first trial that the reliability of Totten's data was an issue. However, twice he deliberately decided to avoid getting into the details of Totten's six studies. The defence now wants a third opportunity to cross-examine Totten and he should be denied that opportunity.

[138] The Crown's position has merit, but I cannot accept it. As I have demonstrated, the fresh evidence was so cogent that it almost entirely undermines the reliability of what seemed to be compelling statistical evidence supporting Totten's opinion on the meaning of a teardrop tattoo. The fresh evidence is at a level of cogency that not merely diminishes the weight of Totten's evidence but serves to disqualify him from giving it.

[139] Although I would order a new trial rather than enter an acquittal, to refuse to admit the fresh evidence because of a lack of due diligence would risk a miscarriage of justice. And it would risk a miscarriage of justice for a young man facing a life sentence with no eligibility for parole for 25 years. Because of the serious consequences for Abbey I think we should be reluctant before allowing the lack of due diligence to override such cogent fresh evidence.

[140] There is another reason not to give effect to the defence's lack of due diligence – and it is an important reason. Totten was the Crown's witness, a key witness for the Crown. Yet in *Gager* the Crown sought to impeach Totten's credibility and the reliability of his evidence on several matters that were relevant to his opinion in this trial. And then on this appeal the Crown made no attempt to contest the deficiencies, inaccuracies, and even falsehoods in Totten's trial testimony, as demonstrated by the fresh evidence. In saying this I intend no criticism whatsoever of Mr. Alvaro. He argued the Crown's position well with his usual candour and fairness. The same may be said for Mr. Harris' and Mr. Pillay's arguments on behalf of Abbey.

[141] But the Crown is not an ordinary litigant. Its role is not to obtain a conviction, but to try to ensure a fair process and a just result. The Crown has impeached Totten, its own key witness, albeit in another proceeding, and yet by its silence in this proceeding must be taken not to have challenged the many serious problems in Totten's trial testimony shown by the fresh evidence. In

these circumstances, it seems to me to be fundamentally unfair and unjust for the Crown to rely on Abbey's lack of due diligence to defeat his fresh evidence application.

[142] I would allow Abbey's application to admit his fresh evidence.

4. Did the trial judge err by failing to instruct the jury not to consider Totten's evidence on the timing of obtaining a teardrop tattoo?

[143] Although I conclude that Abbey is entitled to succeed on his appeal based on the fresh evidence, for the sake of completeness I will briefly address his argument on the jury charge.

[144] The trial judge's charge to the jury was impeccable. Still, Abbey contends the trial judge made one error. This contention rests on a footnote in Doherty J.A.'s judgment in *Abbey #1*. At para. 63 of his reasons, in discussing the scope of an expert's proposed opinion evidence, Doherty J.A. added the following footnote:

> Note 6: Dr. Totten's *voir dire* evidence affords an example of the need to consider different parts of the proposed opinion evidence individually. Whatever may be said about the admissibility of Dr. Totten's opinion concerning the meaning of a teardrop tattoo, his evidence as to the timing of the inscription of the tattoo (para. 51) does not seem founded either in his research or his clinical experience, but rather seems a product of what Dr. Totten thought was common sense. It may be that this aspect of Dr. Totten's evidence would not be admissible even if his main opinion was admitted.

[145] At trial Totten testified that typically a gang member who had killed a rival gang member would obtain a teardrop tattoo within six months of the killing. Abbey obtained his teardrop about four months after Peter was murdered. The defence not only did not object to this aspect of Totten's evidence, in the pre-charge conference the defence agreed with the Crown that Totten could testify about the timing of obtaining a teardrop tattoo.

[146] In his charge the trial judge did not refer to Totten's evidence on timing. Again the defence did not object or ask for a specific instruction. Now on appeal, however, Abbey submits, consistent with Doherty J.A.'s footnote, that the trial judge should have instructed the jury to ignore Totten's evidence about the timing of obtaining a teardrop tattoo. I do not accept Abbey's submission for four reasons.

[147] First, Doherty J.A.'s comment in the footnote was not mandatory. He left to the trial judge the decision whether to exclude the evidence on timing or at least instruct the jury not to consider it.

[148] Second, on my reading of Totten's testimony (and not taking into account the reliability concerns brought to light by the fresh evidence), his evidence about timing did seem to have a basis in his clinical experience.

[149] Third, Totten's evidence on timing was equivocal, as at least one part of it helped the defence. Totten testified that he would not expect a gang member to

get a teardrop tattoo where the gang member finds out shortly after the murder that the person he killed was not a rival gang member. The defence argued to the jury that Abbey would have known within four months after the murder that Peter was not a member of the Galloway Boys. Thus relying on this aspect of Totten's evidence the defence submitted that Abbey did not obtain a teardrop tattoo to signify he had killed a rival gang member.

[150] Fourth, even if the trial judge erred in not giving the instruction now asked for – and I do not concede that he did err – the error was minor and harmless. It was highly unlikely to have affected the verdict.

[151] I would not give effect to this ground of appeal.

5. What is the appropriate remedy?

[152] The choice is an acquittal or a new trial. Abbey submits that we ought to enter an acquittal. He has been in custody for nine years. And once Totten's evidence on a teardrop tattoo is excluded, the Crown's case rests principally on the dubious testimony of the three Malvern gang members, Sams, Burton and Williams.

[153] I would not give effect to Abbey's submission. In my view the appropriate order is for another new trial, as unpalatable as that order may be over 13 years after the murder. Admittedly without Totten's evidence on the meaning of a teardrop tattoo, the Crown's case is not overly strong. But it is not wholly devoid

of substance. The evidence of Sams, Burton and Williams, each implicating Abbey in the murder, remains. And I note as well, their evidence on their understanding of the meaning of a teardrop tattoo was, along with Totten's evidence, excluded at the first trial, yet held admissible by this court's 2009 judgment in *Abbey #1*, at para. 160. In the light of their evidence I cannot say that no reasonable jury, properly instructed, would convict Abbey.

[154] The Crown is entitled to retry Abbey if it wishes to do so. The interests of Abbey must be taken into account, but so too must the interests of the family of the victim, and the public interest.

E. CONCLUSION

[155] I would admit the fresh evidence, allow the appeal, set aside Abbey's conviction for first degree murder and order a new trial.

Released: "D.D." August 4, 2017

"John Laskin J.A."
"I agree. Doherty J.A."
"I agree. L.B. Roberts J.A."

Fellowes, McNeil v. Kansa General International Insurance Company Ltd. et al.

[Indexed as: Fellowes, McNeil v. Kansa General International Insurance Co.]

40 O.R. (3d) 456

Ontario Court (General Division)
E. MacDonald J.
June 17, 1998

Evidence -- Expert evidence --- Qualifications -- Independence -- Expert witness must be independent and not advocate for party.

Kansa, an insurance company, retained the law firm of FM to act for it with respect to an insurance claim. Kansa became dissatisfied with FM's carriage of the matter, and it terminated the retainer and engaged M, then of the SL law firm, to assume carriage of the insurance claim and to investigate the possibility of a solicitor's negligence claim against FM. Subsequently, FM sued Kansa, and it counterclaimed for damages for solicitor's negligence. At the trial, Kansa sought to call M to give expert evidence of the standard of care of a reasonably competent solicitor. FM objected on the ground that M lacked the independence necessary for an expert witness. FM sought a ruling.

Held, M did not qualify to give expert evidence.

An expert witness must be independent and not an advocate for a party. Expert evidence should be, and should be seen to be, the independent product of the expert uninfluenced by the exigencies of litigation. An expert should provide independent assistance to the court by an objective and unbiased opinion

about the matters within his or her expertise. M could not be an expert because of his early involvement as an advocate for Kansa.

Cases referred to

Fraser River Pile & Dredge Ltd. v. Empire Tug Boats Ltd. (1995), 92 F.T.R. 26, 37 C.P.C. (3d) 119; The "Ikarian Reefer", [1993] 2 Lloyd's Rep. 68; R. v. Abbey, [1982] 2 S.C.R. 24, 138 D.L.R. (3d) 202, 43 N.R. 30, 39 B.C.L.R. 201, [1983] 1 W.W.R. 251, 68 C.C.C. (2d) 394, 29 C.R. (3d) 193; R. v. Mohan, [1994] 2 S.C.R. 9, 114 D.L.R. (4th) 419, 89 C.C.C. (3d) 402, 29 C.R. (4th) 243

Ruling at trial.

W.S. Wigle, Q.C., and Mario R. Pietrangeli, for plaintiff.
A. Burke Doran, Q.C., Clive Elkin and E. Llana Nakonechny, for defendants.

E. MACDONALD J. (orally): -- Mr. McInnis delivered a report under cover of a letter dated June 7, 1997. This letter is addressed to the attention of Mr. Doran and Mr. Elkin. Mr. Doran and Mr. Elkin propose to qualify Mr. McInnis as an expert to give opinion evidence on whether or not the conduct of Fellowes, McNeil, when they had carriage of the Uniroyal/Sundor matter, fell below the standard of reasonably competent solicitors. It must be remembered that the Uniroyal/Sundor matter is the third matter which gives rise to the allegations of solicitor's negligence which foot the counterclaim against Fellowes, McNeil.

Mr. Pietrangeli, on behalf of Fellowes, McNeil, objects to Mr. McInnis being permitted to give expert evidence on the matter of whether or not Fellowes, McNeil fell below the standard. The objection is based on two grounds: first, it is said that Mr. McInnis is not independent in that from the very

outset of his retainer by Kansa, Mr. McInnis was acting in two capacities; he was representing Kansa's interest in the Sundor claim and he was investigating the possibility of a claim of solicitor's negligence against Fellowes, McNeil. In essence, it is alleged he was acting as counsel for Kansa in the investigation of the claim for solicitor's negligence and opining on the potential for such a claim against Fellowes, McNeil.

The second aspect of the objection is what I characterize as a fairness consideration arising from a meeting between Mr. McInnis and Mr. McNeil on July 6, 1994, at which time Mr. McNeil was not represented by counsel and was not directly informed that, at that time, a claim was being considered in respect of solicitor's negligence arising from his handling of the Sundor/Uniroyal matter.

The background of Mr. McInnis' retainer may be globally described as follows: He was retained by Kansa to take over this matter from the Fellowes, McNeil firm. His first letter on issues related to the claim is dated April 10, 1994. Mr. McInnis met with Mr. Blais and Mr. Faure in Montreal on March 30, 1994, and thereafter provided a detailed written report in a letter addressed to Mr. Blais dated April 20, 1994. McCague, Wires, Peacock, Borlack, McInnis & Lloyd, a Toronto law firm of which Mr. McInnis is a partner, was retained in September 1994 to assume carriage of the matter from Smith, Lyons. A description of the retainer of McCague, Wires, Peacock, Borlack, McInnis & Lloyd is contained in an answer to an undertaking at the discovery of Mr. Blais. It is as follows:

> McCague, Wires, Peacock, Borlack, McInnis & Lloyd was retained in September 1994 to assume carriage of the matter from Smith, Lyons. This included representing Kansa as an intervenor in the Sundor action; in the appeal of the Uniroyal defence application; and in the application to determine the indemnity duty to Uniroyal.
>
> Mr. McInnis states that Kansa initially retained Smith, Lyons in 1994 to represent it on the appeal of Uniroyal's defence application and as intervenor in the Sundor action. It

> quickly became apparent that the existing appeal materials were ill-conceived in light of the law pertaining to the duty to defend and pollution exclusions. Even more puzzling at the onset was Kansa's pursuit of intervenor status in the first place when all it required was a simple denial of coverage on the basis of the pollution exclusions. Prior to the end of March 1994, Kansa advised Smith, Lyons that it was dissatisfied with the manner in which Fellowes, McNeil had approached the case. Smith, Lyons was instructed to investigate the prior handling of the case which included reviewing the matter with prior counsel and allowing prior counsel the opportunity to provide an explanation as to why it favored intervening or the seemingly more obvious and appropriate solution of denying coverage.

I should point out that the Smith, Lyons retainer appears to have occurred at a time when Mr. McInnis was a member of that firm and that he, together with the other partners in McCague, Wires, Peacock, Borlack, McInnis & Lloyd, appear to have taken this file with them when they established their own firm some time in 1994.

It is apparent that from the early stages of its retainer, McCague, Wires (of which Mr. McInnis is a partner) was addressing the possibility of an errors and omissions claim against Fellowes, McNeil.

Mr. McInnis was investigating this possibility and, without advising Mr. McNeil of the situation, arranged to meet with Mr. McNeil on July 6, 1994. Mr. McInnis did tell Mr. McNeil that Kansa was upset with the direction of the matter from the outset and that Mr. McInnis wanted to know why Mr. McNeil had adopted the strategy of intervention as opposed to a denial of coverage. This is evident from an answer to an undertaking also given on the examination for discovery of Mr. Blais. It is contained in an answer to Question 1597-8 which reads as follows:

> To ask Mr. McInnis whether he advised Mr. McNeil prior to arranging their meeting that he had expressed opinions to Kansa about Mr. McNeil's conduct of the matters and had

suggested a possibility of an errors and omissions claim against him.

Answer: During the meeting on July 6, 1994, Mr. McInnis does not believe that he advised Mr. McNeil that he was advising Kansa with respect to making a possible errors and omissions claim. Mr. McInnis again advised that he was retained to represent Kansa in the ongoing Sundor action and the appeal as well as to look into why the file had taken its current direction as Kansa was unhappy with paying two sets of defence costs when it appeared to him that a simple denial of coverage was in order from the outset. Upon realizing that Mr. McNeil had missed the pollution exclusion at the outset of the matter, he recognized the possibility of an errors and omissions claim himself and asked that Mr. McInnis do him the courtesy of advising him in advance before any such claim was made. Mr. McInnis did not have the opportunity to do this as Lang Michener was appointed to handle this aspect of the matter.

An expert must have a minimum requirement of independence. I agree with Mr. Pietrangeli that the role of Mr. McInnis is, in a sense, unprecedented. He is involved in the defence of Uniroyal (on behalf of Kansa) and he has been proposed as an expert on matters pertaining to the standard by which the solicitors will be ultimately judged as to whether or not they performed in a manner consistent with that of reasonably competent solicitors handling complex insurance matters. By reason of the roles assumed by him, I find that Mr. McInnis cannot be such an expert. He has been an advocate for Kansa's positions since he became involved in the matter, apparently in late February 1994.

There is sufficient material before the court to permit the court to deal with this matter now, that is to say, at this time as opposed to some future point, for example, during the trial when Mr. McInnis is called as a witness, and at that time faces this challenge to his role as an expert.

It is obvious from the documents and the letters to which I have been referred in detail that Mr. McInnis is a witness with

a lot of factual information relevant to the matters which are before the court; but he cannot be an expert because of his early involvement as an advocate for Kansa on the matter of the investigation and potential claim for negligence against the Fellowes, McNeil firm. I note also in this context that the existence of the claim and the possibility of the claim was considered as part of the strategy for attempting to negotiate settlement of the Sundor action. At one point it was suggested that Mr. Wigle, who was then known to have been appointed by LPIC, be approached with a view to seeking some contribution from LPIC to an overall settlement.

I turn briefly to the case law in the role of an expert. Experts must not be permitted to become advocates. To do so would change or tamper with the essence of the role of the expert, which was developed to assist the court in matters which require a special knowledge or expertise beyond the knowledge of the court. In this case, the question is whether the conduct of Fellowes, McNeil fell below the standard of reasonably competent solicitors handling complex insurance matters. If I look to only two of the seven duties and responsibilities of experts testifying in civil cases that are laid out in The "Ikarian Reefer", [1993] 2 Lloyd's Rep. 68 at p. 81, I have to conclude that this would not be a case for Mr. McInnis to assume the role of an expert. These duties are:

(1) Expert evidence presented to the court should be, and should seen to be, the independent product of the experts uninfluenced as to the form or content by the exigencies of litigation.

(2) An expert should provide independent assistance to the court by objective, unbiased opinion in relation to matters within his or her expertise. An expert witness should never assume the role of advocate.

I comment briefly on the comparison of] Mr. McInnis to the role of Mr. Peter Trebuss who testified in this trial in the matter now referred to as Cabaret and Downing. The court has the transcript of Mr. Trebuss's testimony at this trial, as do counsel. I do not find that there is any comparison between the

two. Mr. Trebuss was retained to take over the Cabaret Downing matter and acted on behalf of Kansa in bringing the case to its conclusion by way of settlement. Unlike Mr. McInnis, Mr. Trebuss was not investigating, from the outset of his retainer, the matter of a potential claim based on negligence against Fellowes, McNeil.

In concluding this ruling I add that I do not find that this motion being brought at this stage of the trial is in the nature of ambush as suggested by Mr. Doran. In this case, the litigants and their counsel are highly experienced and able to respond to the exigencies that flow from motions at trial and more generally the strategies that develop at trial as the trial proceeds.

Finally, an expert's report "cannot be advocacy dressed up as expert opinion". They are the words of Reed J. in Fraser River Pile & Dredge Ltd. v. Empire Tug Boats Ltd. (1995), 37 C.P.C. (3d) 119 at p. 126, 92 F.T.R. 26. I note also Justice Reed's references to two well-known cases dealing with the matter of experts. These references are contained at p. 124 of her judgment, where she refers to R. v. Mohan, [1994] 2 S.C.R. 9, 114 D.L.R. (4th) 419, and the comments of Mr. Justice Sopinka contained therein. She also refers to a passage which appears in R. v. Abbey, [1982] 2 S.C.R. 24 at p. 42, 138 D.L.R. (3d) 202, referred to by Mr. Justice Sopinka in the Mohan case.

The motion brought by Mr. Pietrangeli succeeds; I will endorse the trial record briefly to indicate that that motion is successful for the oral reasons that I have now completed dictating.

Ruling accordingly.

CITATION: M.M. v. R.M., 2016 ONSC 7003
BELLEVILLE COURT FILE NO.: FS-13-0193
DATE: 20161031

ONTARIO

SUPERIOR COURT OF JUSTICE

BETWEEN:	)	
M.M.	)	
Applicant	)	Heather Hansen/Jenna Beaton, for the Applicant
– and –	)	
R.M.	)	Steven Baldwin, for the Respondent
Respondent	)	
	)	**HEARD:** October 28, 2016 (within the trial that commenced October 17, 2016)

DECISION ON VOIR DIRE

MINNEMA J.

[1] The respondent seeks to lead expert opinion evidence by Keith W. Shantz CPA-CA, CFP on all matters relating to the respondent's income for spousal support purposes. That request is opposed.

Law

[2] Opinion evidence is presumptively inadmissible. Expert evidence is an exception. As set out in *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23 at paragraph 19, the basic structure for the law relating to the admissibility of expert opinion as established in *R. v. Mohan*, [1994] 2 S.C.R. 9, has two components. First, the proponent of the evidence must establish each of the following on a balance of probabilities: (1) relevance, (2) necessity in assisting the trier of fact, (3) absence of an exclusionary rule, and (4) a properly qualified expert.

Second, if those threshold requirements are met, the trial judge must then conduct a cost-benefit/gate-keeping analysis and still exclude the evidence if the probative value of the opinion is overborne by its prejudicial effect.

Positions

[3] The respondent wants Mr. Shantz to be recognized as an expert to provide opinion evidence on (1) the respondent's historical income, (2) the difference between the respondent's income per his personal income tax returns and the actual income available to him, (3) comparisons of the net disposable incomes of the parties from 2013 to date, and (4) an opinion of the respondent's income for 2016.

[4] The applicant has no difficulty with Mr. Shantz giving evidence along the lines of explaining the calculations he has made in support of the respondent's position regarding income. She also has no difficulty with Mr. Shantz explaining the advice that he gave to the respondent and his businesses in the course of their dealings. However, she draws the line at Mr. Shantz being qualified to give an opinion to the court on what the respondent's income should be for spousal support purposes. Referring to the *Mohan* threshold criteria, her position is that it is not necessary, an exclusionary rule applies with respect to timing, and that Mr. Shantz is not qualified.

[5] The issue is not whether Mr. Shantz can give opinions as a 'participant expert' relating to the subject matter of the litigation for a purpose other than the litigation: see *Westerhof v. Gee Estate*, 2015 ONCA 206 at paragraphs 62 and 82. That is conceded per the above paragraph. The objection is to Mr. Shantz being qualified as a 'litigation expert' to give an opinion for the very purpose of this litigation.

Evidence

[6] Mr. Shantz is a qualified accountant. He suffered a stroke in 2011 that very significantly reduced the number of clients he serves, however he is still the accountant for the respondent and his companies and has been providing that service since 1977. His expertise is corporate organization/re-organization and planning. He also assists clients to obtain financing. While he

has provided some limited expert evidence in court over the course of his forty-year career, it was regarding the valuation of businesses. He does business valuations for the respondent and his companies on an ongoing basis. I note that the valuation of the respondent's businesses is not a live issue in this case.

[7] The substance of the proposed expert testimony from Mr. Shantz relates to the respondent's income for spousal support purposes. He has not given expert evidence on this issue in the past. He was asked by the respondent here to do income analyses for the purposes of this litigation. He asserts expertise in having done numerous personal income tax returns over the course of his career. While he indicates that much of his evidence will be fact based – just mathematics on numbers that are not in issue – he also indicates that he might not agree with the expert witness who has already given opinion evidence on income determination. He confirms that he did not perform an income analysis pursuant to the Child Support Guidelines ("CSG") or the Spousal Support Advisory Guidelines ("SSAG"). He has filed a number of 'pro-forma' income tax returns as an 'aide', which means that he has taken the actual returns that were filed by the respondent with the Canada Revenue Agency and adjusted them to show the respondent's position in this trial. He admits that this exercise and other calculation aides that he has prepared for the respondent are "pure math."

[8] Mr. Shantz submits that his evidence will be unbiased and that, although he has worked for the respondent and his companies for the past three almost four decades, he is an "independent person". He has filed an Acknowledgement of Expert's Duty per Rule 4.1 of the Rules of Civil Procedure to that effect.

Analysis

Necessity

[9] The applicant asserts that Mr. Shantz's evidence is not necessary. He has no technical or specialized scope of knowledge, and his evidence is simply math. He did not consult the CSGs or the SSAGs which is the starting point for spousal support income calculations (see *Mason v. Mason*, 2016 ONCA 725 starting at paragraph 48). She relies on *Kirby Lowbed Services Ltd. v. Bank of Nova Scotia*, 2003 BCSC 617 at paragraphs 14, 22, and 23 for the proposition that expert

opinion evidence is only admissible where the judge is unable due to the technical nature of the facts to draw appropriate inferences. In that case an accountant's opinion evidence was found not to be necessary in the sense that the information provided was likely to be outside of the court's experience and knowledge.

[10] The respondent did not address this part of the test other than as follows. I asked whether the proffered opinion on income is something that this witness gives regularly in the course of his work. The answer was a question back to me along the lines of how else does the respondent challenge the evidence of the applicant's expert. In *Sordi v. Sordi*, 2011 ONCA 665 at paragraphs 13 and 14 the court held that necessity does not arise from the need to critique another expert's evidence. That can be done, as was done here, by Mr. Shantz being permitted to remain in court during the testimony of the applicant's expert in order to assist the respondent's counsel in formulating questions for cross-examination.

[11] In my view the respondent has not met his onus of establishing that the opinion evidence of Mr. Shantz is necessary. While that ends the analysis, I will address the other issues briefly, as indeed the main objection in my view was related to Mr. Shantz's qualifications.

Exclusionary Rule

[12] The respondent argues that the report has not complied with the rules for the timing of service of the expert's report. This point was not fully developed other than by reference to the regulatory timelines. It is not entirely clear which report was in issue and whether the last one could be characterized as a "supplemental report". There was no reference to the test for leave, and no argument on prejudice. There was no sense of surprise or a need by the applicant for additional time to properly address the last report. I would not refuse to admit Mr. Shantz's evidence solely on the basis of timing.

A Properly Qualified Expert

[13] While Mr. Shantz in his Acknowledgement of Expert's Duty says that he will provide "opinion evidence related only to matters that are within my area of expertise", there is no evidence that he has the expertise to provide an opinion regarding income determination for

support purposes. It is not found in his statement of experience and education. Again, he did not consider the CSGs or the SSAGs. While he cites the numerous income tax returns he has completed as the basis for his expertise, I note that many accountants and non-accountants alike complete volumes of tax returns and all would not be considered experts in this area. In my view Mr. Shantz does not have the required expertise to provide the opinion he seeks to give.

[14] The second issue is the applicant's position that Mr. Shantz is not independent and impartial. As noted in *White Burgess* at paragraph 53, this consideration properly falls within the 'properly qualified expert' threshold criteria under the *Mohan* test, although it is also a consideration at the gatekeeping stage (paragraph 54).

[15] While the proponent of the expert evidence ultimately has the burden of establishing its admissibility, there is actually a shifting burden when it comes to independence and impartiality. The expert's attestation (Acknowledgement of Expert's Duty) or similar testimony is sufficient to meet this threshold, unless it is challenged as it has been here. The burden is then on the challenging party to show that there is a realistic concern that the expert's evidence should not be received because the expert is unable and/or unwilling to comply with that duty. If successful, then the burden to establish this aspect of the admissibility threshold remains on the party proposing to call the evidence: see *White Burgess* at paragraphs 47 and 48.

[16] As noted Mr. Shantz has testified that he accepts the duty. Therefore the burden is on the applicant to raise a realistic concern that he is unable to comply with that duty. She does so as follows. The duty is to provide "fair, objective and non-partisan" opinion evidence. This requires an expert that is independent and neutral, and who does not become an advocate for the position of the party who retained them: see *Carmen Alfano Trust v. Piersanti*, 2012 ONCA 297 at paragraphs 105, 107, and 108. In this case Mr. Shantz 'becoming' an advocate for the respondent after being engaged to give an opinion doesn't really apply as he was already the accountant for the respondent long before he was approached to give his opinion. In other words, it was impossible for the respondent to ensure that Mr. Shantz was informed of the expert's role and duties at the *outset* of his engagement. To be neutral there needs to be a distance between Mr. Shantz and the information. He is actually the source of the financial information being relied on, and also the architect of the arrangements relating to the

respondent's income and compensation. It is impossible to untangle this longstanding work and suggest that his opinion is now somehow impartial. As noted in *Ebrahim et al. v. Continental Precious Minerals Inc. et al.*, 2012 ONSC 2918 at paragraph 46 "… a person under retainer to a party to litigation, however qualified he might be in a subject area, lacks the independence necessary to provide opinion evidence that is "fair, objective and non-partisan"."

[17] The applicant has raised realistic concerns that the expert's evidence should not be received because of an inability to comply with the duty to be independent and impartial. The respondent in turn has not established this admissibility threshold on a balance of probabilities.

Decision

[18] For the reasons that the evidence is not necessary and Mr. Shantz is not a properly qualified expert in the sense of having the expertise and the requisite independence and impartiality, he is not permitted to give opinion evidence regarding the respondent's income for spousal support purposes.

Mr. Justice Timothy Minnema

Released: October 31, 2016

Ontario Energy Board

Commission de l'énergie de l'Ontario

EB-2010-0008

IN THE MATTER OF AN APPLICATION BY

ONTARIO POWER GENERATION INC.

PAYMENT AMOUNTS FOR PRESCRIBED FACILITIES FOR 2011 AND 2012

DECISION WITH REASONS

March 10, 2011

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EB-2010-0008

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O.1998, c.15, (Schedule B);

AND IN THE MATTER OF an application by Ontario Power Generation Inc. pursuant to section 78.1 of the *Ontario Energy Board Act, 1998* for an Order or Orders determining payment amounts for the output of certain of its generating facilities.

BEFORE: Cynthia Chaplin
Presiding Member & Chair

Marika Hare
Member

Cathy Spoel
Member

DECISION WITH REASONS

MARCH 10, 2011

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Appendices:

1 INTRODUCTION

Ontario Power Generation Inc. ("OPG") filed an application with the Ontario Energy Board (the "Board") on May 26, 2010. The application was filed under section 78.1 of the *Ontario Energy Board Act, 1998*, S.O 1998, c. 15 (Schedule B) (the "Act"), seeking approval for payment amounts for OPG's prescribed generation facilities for the test period January 1, 2011 through December 31, 2012, to be effective March 1, 2011. The Board assigned the application file number EB-2010-0008.

OPG also requested that the Board issue an order declaring the current payment amounts interim if the new payment amounts are not implemented by March 1, 2011. By order dated February 17, 2011, the Board declared the current payment amounts interim effective March 1, 2011.

1.1 Legislative Requirements

Section 78.1(1) of the Act establishes the Board's authority to set the payment amounts for the prescribed generation facilities. Section 78.1 can be found at Appendix D of this Decision. Section 78.1(4) states:

> The Board shall make an order under this section in accordance with the rules prescribed by the regulations and may include in the order conditions, classifications or practices, including rules respecting the calculation of the amount of the payment.

Section 78.1(5) states:

> The Board may fix such other payment amounts as it finds to be just and reasonable,
> (a) on an application for an order under this section, if the Board is not satisfied that the amount applied for is just and reasonable; or
> (b) at any other time, if the Board is not satisfied that the current payment amount is just and reasonable.

Ontario Regulation 53/05, *Payments Under Section 78.1 of the Act,* ("O. Reg. 53/05") provides that the Board may establish the form, methodology, assumptions and calculations used in making an order that sets the payment amounts. O. Reg. 53/05

also includes detailed requirements that govern the determination of some components of the payment amounts.

O. Reg. 53/05 affects the setting of payment amounts for the prescribed generation facilities in three principal ways:

1. requiring that OPG establish certain variance and deferral accounts and that the Board ensure recovery of the balance in those accounts subject to certain conditions being met;
2. requiring that the Board ensure that certain costs, financial commitments or revenue requirement impacts be recovered by OPG; and
3. setting certain financial values that must be accepted by the Board when it makes its first order under section 78.1 of the Act.

The last item was addressed in the first payment amounts proceeding, EB-2007-0905.

O. Reg. 53/05 can be found at Appendix E.

1.2 The Prescribed Generation Facilities

OPG owns and operates both regulated and unregulated generation facilities. As set out in section 2 of O. Reg. 53/05, the regulated, or prescribed, facilities consist of three nuclear generating stations and six hydroelectric generating stations. These facilities produce approximately 48% of Ontario's electricity.

Table 1: Prescribed Generation Facilities

Hydroelectric		Nuclear	
Station	**Capacity[1]**	**Station**	**Capacity[1]**
Sir Adam Beck I	417 MW	Pickering A NGS	1,030 MW
Sir Adam Beck II	1,499 MW	Pickering B NGS	2,064 MW
Sir Adam Beck Pump Generating Station	174 MW	Darlington NGS	3,512 MW
DeCew Falls I	23 MW		
DeCew Falls II	144 MW		
R.H Saunders	1,045 MW		
Total	**3,302 MW**		**6,606 MW**

Note 1: Net in-service capacity
Source: Exh. A1-4-2, Chart 1 and Exh. A1-4-3, Chart 1

OPG also owns the Bruce A and B nuclear generating stations. These stations are leased on a long term basis to Bruce Power L.P. Under section 6(2)9 of O. Reg. 53/05, the Board must ensure that OPG recovers all the costs it incurs with respect to the Bruce nuclear generating stations. Under section 6(2)10 of O. Reg. 53/05, the revenues from the lease, net of costs, are to be used to reduce the payment amounts for the prescribed nuclear generating stations.

OPG has entered into a Memorandum of Agreement ("MOA") with its shareholder. This MOA sets out the shared expectations of the shareholder and the company regarding mandate, governance, performance and communications. Included in its provisions related to the nuclear mandate are expectations related to continuous improvement, benchmarking, and improved operations. The MOA is reproduced in Appendix G.

1.3 Previous Proceedings

The current application is OPG's second cost of service application. The first cost of service application, EB-2007-0905, was filed on November 30, 2007. The Board's decision on the 21 month test period, April 1, 2008 to December 31, 2009, was issued on November 3, 2008.

OPG filed two notices of motion for review and variance seeking to vary the portion of the EB-2007-0905 decision dealing with the treatment of tax losses. The first motion, EB-2008-0380, filed on November 24, 2008, was dismissed. The second motion, EB-2009-0380 was filed on January 28, 2009 and a decision granting the motion was issued on May 11, 2009. This decision is discussed further in Chapter 10.

On June 9, 2009, OPG filed an application for an accounting order regarding deferral and variance accounts approved in EB-2007-0905. As part of the application, OPG informed the Board that it had deferred the filing of its payment amounts application by one year. The decision, under file number EB-2009-0174, which addressed the treatment of deferral and variance accounts for the period after December 31, 2009, was issued on October 6, 2009.

The Board initiated a consultation on the filing guidelines for the current payment amounts application on September 24, 2009. The filing guidelines were issued under file number EB-2009-0331 on November 27, 2009.

1.4 The Application

In advance of its application, OPG held stakeholder information sessions on March 29, 2010 and April 1, 2010. At those sessions, OPG indicated that it would file the 2011-2012 payment amounts application in mid-April. However, on April 15, 2010, OPG advised that the application would be delayed to late May and that OPG was reviewing the application to identify ways to further lessen the impact of its request on ratepayers.

The application was filed on a Canadian GAAP basis on May 26, 2010. The proposed revenue requirement and recovery of deferral and variance accounts, as filed on May 26, 2010, is summarized in the following table.

Table 2: Proposed Revenue Requirement

$ million	Regulated Hydroelectric			Nuclear			Test Period Total
	2011	2012	Test Period	2011	2012	Test Period	
Expenses							
OM&A	$128.2	$125.9	$254.1	$2,021.2	$2,067.9	$4,089.1	$4,343.2
Gross Revenue Charge/Nuclear Fuel	257.1	252.2	509.3	235.6	261.7	497.3	1,006.6
Depreciation and Amortization	65.6	65.0	130.6	235.4	256.4	491.8	622.4
Property and Capital Taxes	-	-	-	16.0	16.6	32.6	32.6
Income Taxes	30.6	27.4	58.0	53.9	75.9	129.8	187.8
Cost of Capital							
Short-term Debt	4.6	6.1	10.7	3.0	4.3	7.3	18.0
Long-term Debt	106.9	105.8	212.7	70.8	74.4	145.2	357.9
Return on Equity	176.1	175.3	351.4	116.6	123.2	239.8	591.2
Adjustment for Lesser of UNL or ARC	-	-	-	85.0	83.1	168.1	168.1
Other Revenue							
Ancillary and Other	44.9	46.2	91.1	32.0	24.0	56.0	147.1
Bruce Revenue Net of Costs	-	-	-	128.1	143.0	271.1	271.1
Revenue Requirement	**$724.2**	**$711.5**	**$1,435.7**	**$2,677.4**	**$2,796.5**	**$5,473.9**	**$6,909.6**
Deferral and Variance Account Recovery	**(39.5)**	**(47.3)**	**(86.8)**	**227.1**	**232.8**	**459.9**	**373.1**

Source: Exh. I1-1-1, Table 1

With some exceptions, OPG proposed that the 2010 year end balances in the deferral and variance accounts be amortized over a 22 month period from March 1, 2011 to December 31, 2012. The major exception to that proposal is the tax loss variance account, which OPG proposed be amortized over a 46 month period, from March 1, 2011 to December 31, 2014, in order to lessen ratepayer impact. To achieve the revenue requirement and disposition of balances in the deferral and variance accounts, OPG requested the payment amounts and riders shown in the following table, which also provides the current payment amounts and riders.

Table 3: Payment Amounts and Rate Riders

($ per MWh)	Hydroelectric	Nuclear
Current		
Payment Amount	36.66	52.98
Rate Rider	—	2.00
Total	36.66	54.98
Proposed		
Payment Amount	37.38	55.34
Rate Rider	(2.46)	5.09
Total	34.92	60.43

Source: Exh. A1-2-2 (as filed May 26, 2010)

OPG estimated that if the application was approved as filed, the combined effect of the proposed payment amounts and rate riders would be an increase of 6.2% over the current payment amounts. This would be a 1.7% or $1.86 increase on the monthly total bill for a typical residential consumer consuming 800 kWh per month.

A summary of the approvals that OPG is seeking in the current application is found at Appendix B.

1.5 The Proceeding

Details of the procedural aspects of the proceeding are provided in Appendix A.

The Board issued Procedural Order No. 3 on July 21, 2010, establishing the final issues list for the proceeding. That list is found at Appendix F.

The Board received five letters of comment in response to the notice of application. The Board has reviewed each of these letters. The letters raise a variety of issues, many of which are dealt with in this Decision and others which are beyond the scope of this proceeding. Although the Board will not address each letter specifically, these comments have been taken into account in the Board's deliberations.

Two parties applied for, and were granted, observer status. Thirteen parties applied for and were granted intervenor status. The following intervenors took an active role in the proceeding: The Association of Major Power Consumers in Ontario ("AMPCO"), Canadian Manufacturers & Exporters ("CME"), Consumers Council of Canada ("CCC"), Energy Probe Research Foundation ("Energy Probe"), Green Energy Coalition ("GEC"), Pollution Probe Foundation ("Pollution Probe"), Power Workers' Union ("PWU"), School Energy Coalition ("SEC"), Society of Energy Professionals ("Society") and Vulnerable Energy Consumers Coalition ("VECC").

CME and CCC brought motions seeking production of certain materials. The Board denied the motions in an oral decision on October 4, 2010. A copy of the decision on the motions can be found at Appendix C.

During the proceeding, confidential treatment was granted for a large number of documents. These documents are filed at the Board's offices.

1.6 Board Observations

This Decision addresses a large number of issues. Most of these issues were material in nature; a number were not. Quite a number of very material issues were explored somewhat late in the process; in some cases the arguments themselves contained what could be characterized as evidence. The regulation of OPG is complex. It is imperative that the high priority issues be identified early and explored thoroughly and effectively during the proceeding.

The Board understands that many of the issues pursued by the parties were sizeable in the absolute sense, often involving millions of dollars. However, issues must be prioritized to ensure that the most significant issues, in terms of dollars and/or in terms of principle, are adequately investigated to ensure an appropriate outcome. The Board and the process are best served by the thorough investigation of the highest priority issues.

It is the Board's conclusion that a number of issues which parties pursued vigorously in cross-examination and argument were not of sufficiently high priority in terms of the dollars or the principle involved. The Board's concern is that an inordinate focus on lower priority issues diminishes the time and resources available to pursue the more substantive, higher priority issues. This is not intended as a criticism of any of the

parties; nor is it an indication that there was insufficient evidence for the Board to render its decision. Rather, these comments are intended to guide the parties as to the Board's expectations for the next proceeding based on our observations of this proceeding.

The Board will explore with OPG and stakeholders how best to identify issues in the next proceeding to ensure that the highest priority issues are identified early.

The Board would also observe that at times the analysis was complicated by the fact that data was presented in ways which was not always comparable. The Board expects OPG to present data on a consistent basis so that comparisons are accurate.

1.7 Summary of Board Findings

The Board has adjusted OPG's requested revenue requirement in some areas and has increased the forecast of revenues in some areas. The following list summarizes those adjustments; the details of the findings are contained in the subsequent chapters of this Decision:

- An increase in forecast hydroelectric production, including a provision for increased Gross Revenue Charge and a variance account to capture the effects of Surplus Baseload Generation;
- An increase in forecast revenue from water transactions;
- An increase in forecast nuclear production, including a provision for increased nuclear fuel costs;
- A sharing of the revenues generated from sales of heavy water;
- A provision for increases in Canadian Nuclear Safety Commission costs;
- The removal of CWIP from rate base;
- A reduction in nuclear compensation costs in 2011 and 2012;
- An update for the return on equity, in accordance with the Board's policy; and
- An adjustment to the Hydroelectric Incentive Mechanism.

The following list identifies the studies and reports that the Board has directed OPG to complete in this Decision:

- Benchmarking of Nuclear Performance;
- Nuclear Staffing Benchmark Analysis;

- Review of Nuclear Fuel Procurement Program ;
- Compensation Benchmarking Study; and
- Depreciation Study.

OPG applied for a total revenue requirement of $6,909.6 million and deferral and variance account recovery of $373.1 million for the two-year test period, resulting in an average payment increase of 6.2%. The Board does not yet have all of the data necessary to establish the final revenue requirement because certain calculations remain to be completed by OPG. Based on the data the Board does have, the Board anticipates a small upward adjustment in the payment amounts that is in the range of less than 1%.

2 BUSINESS PLANNING AND BILL IMPACTS

2.1 Business Planning

The application is based on OPG's 2010-2014 business plan. OPG's business planning process is an annual decentralized process, although planning instructions originate from the finance department. The individual business units develop specific strategic and performance objectives and plan work to achieve the objectives. For the nuclear business, the 2010-2014 business plan incorporates "gap-based" and "top-down" business planning approaches. The gap-based business planning approach was introduced as part of the Phase 2 nuclear benchmarking initiative. There is further discussion of this approach later in this Decision.

In response to the financial and economic environment, OPG's business planning guidelines for 2010 required an $85 million reduction in OM&A compared with previously planned levels for that year. The 2010-2014 business plan was approved by the OPG Board of Directors in November 2009 and received shareholder concurrence.

At stakeholder information sessions held in late March and early April 2010, OPG indicated that it would file its application in mid-April. On April 15, 2010, OPG communicated to stakeholders that the timing for the application had been adjusted to late May and that OPG was reviewing its application to identify ways to further lessen the impact of its request on ratepayers. In May 2010, OPG decided to delay the requested implementation date for new payment amounts to March 1, 2011 and extended the proposed recovery period for the tax loss variance account. These changes were reviewed and approved by the OPG Board of Directors.

The PWU submitted that the assumptions in the 2010-2014 business plan are an appropriate basis on which to set payment amounts. The PWU is concerned, however, with the top-down business planning process used for the nuclear business, and the introduction of the gap-based approach using benchmarking results. The PWU stated that the benchmarking comparators were not peers and further stated that the top-down business planning approach is not appropriate given the capital intensive nature of the business, the technical complexity of the CANDU generators and the strict regulatory requirements of the nuclear business.

CME took issue with OPG's statements regarding the $85 million reduction, referring to the OPG press release dated March 29, 2010:

> We deferred our rate application once but we must go to the OEB this year to make a request for an increase in our regulated rates. We continue to look for internal savings on top of the $85 million we've saved to date.

CME argued that OPG did not reduce OM&A as suggested, but rather only reduced the original increase in OPG's 2009-2013 business plan by $85 million. CME described this and other examples (e.g. $260 million work-drive cost savings discussed later in this Decision at Chapter 4) as misleading characterizations of cost increases as cost reductions.

CME submitted that OPG's business planning process is deficient because it fails to consider total electricity price increases and other economic circumstances facing consumers in deriving the budgets and estimates that form the basis of the application. CME observed that, based on a plain reading of OPG's business planning instructions, the Board could conclude that OPG considers economic turmoil and the hardship consumers are facing in its planning process. CME submitted that, based on the testimony of OPG witnesses, one could conclude that OPG was of the view that the Board can only consider budgets, cost estimates and work programs when determining just and reasonable rates and that the economic hardship facing consumers merely set the context for OPG's planning.

CME submitted that the Board would be ignoring the statutory objectives set out in section 1(1)1 of the Act if it accepts OPG's business planning approach. The objective states:

> 1(1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives:
> 1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.

Further, CME referred to the Minister of Energy and Infrastructure's letter of May 5, 2010, to OPG regarding the impact of the recent recession:

> Bearing that in mind, I would request OPG carefully reassess the contents of its rate application prior to filing with the Ontario Energy Board. I would

> like OPG to demonstrate concerted efforts to identify cost saving opportunities and focus your forthcoming rate application on those items that are essential to the safe and reliable operation of your existing assets and projects already under development.

CME submitted that the evidence in the case reveals that neither the hydroelectric business nor the nuclear business was asked to reassess the contents of their respective business plans, or to identify ways to lessen costs. Based on the testimony of OPG witnesses, CME observed that the Business Planning group concluded that the business plan already addressed the Minister's concerns. CME submitted that OPG's response to the requests of the Minister should be of concern to the Board.

CCC observed that the "Renewed Regulatory Framework for Electricity" announced by the Board on October 27, 2010 is specifically tied to green energy investments. CCC submitted that neither the Board's policy initiative nor the Ontario Clean Energy Benefit, which provides residential consumers with a 10% rebate, absolve OPG from taking total bill impacts into consideration in its planning.

With respect to the obligation of utilities, CCC referred to the Ontario Court of Appeal decision in the Toronto Hydro-Electric System Ltd. ("Toronto Hydro") case. CCC submitted that the principles of the decision apply for all intents and purposes to OPG:

> The principles that govern a regulated utility that operates as a monopoly differ from those that apply to private sector companies, which operate in a competitive market. The directors and officers of unregulated companies have a fiduciary duty to act in the best interests of the company (which is often interpreted to mean in the best interests of the shareholders) while a regulated utility must operate in a manner that balances the interests of the utility shareholders against those of its ratepayers. If a utility fails to operate in this way, it is incumbent on the OEB to intervene in order to strike this balance and protect the interests of the ratepayers.[1]

Both CME and CCC submitted that OPG failed to respond appropriately to the Minister's letter of May 5, 2010. CCC submitted that OPG has added to the burden on ratepayers by unnecessarily requesting construction work in progress treatment for the Darlington Refurbishment Project and by not considering a reduction of its return on equity ("ROE"). CME argued that an unregulated market participant would likely make efforts to "hold the line on electricity price increases" in difficult economic

[1] *Toronto Hydro-Electric System Ltd. v. Ontario Energy Board*, [2010] ONCA 284, para. 50 (Leave to Appeal to Supreme Court of Canada denied).

circumstances. CME submitted that the Board could approve a revenue requirement for OPG that reflects a lower ROE, arguing that a temporary reduction in ROE poses no threat to system safety or reliability. CME referred to the period prior to 2008 when the shareholder acknowledged that it did not need a full equity return to cover its actual costs of capital. At the time, the shareholder used a 5% return on equity to establish the revenue requirement for OPG.

OPG replied that the criticisms of the company's business planning process related to issues that, in OPG's view, have nothing to do with the company. OPG disagreed that it is obliged to consider costs over which it has no control.

With respect to the parties' reference to the Toronto Hydro case, OPG stated that the Board's decision, which was upheld by the Court, was related to concern about under-investment in physical plant and was hence a matter of prudence.

With respect to the Minister's letter of May 5, 2010, OPG replied that senior management had decided to delay the application to consider whether the application could be adjusted well before receiving the letter. OPG admitted that it did not change work plans or budgets in the 2010-2014 business plan, but maintained that this was not necessary "given the care OPG took in containing costs over which it has control during business planning."[2]

Board Findings

OPG has adopted a new planning process in the nuclear business, with an emphasis on top-down planning and a gap-based approach designed to drive significant improvement in OPG's operations. The Board does not share the concerns expressed by PWU in this area. The business planning process used by the nuclear division ("gap-based" and "top-down") has the potential to result in an important paradigm shift in how OPG operates. This shift is important if OPG is to improve operating and cost performance in its nuclear business. The Board sees no evidence to suggest that this change will bring about a reduction in safety or reliability. For reasons explained more fully in the benchmarking section of this Decision, the Board does not agree with PWU that OPG's business is not suitable for benchmarking. The Board notes that OPG's shareholder has called for benchmarking in its Memorandum of Agreement. As noted in several places in this Decision, the Board will assess the results of this change in the planning process and the emphasis on continual improvement in future applications.

[2] Reply Argument, p. 13.

With respect to the Minister's letter of May 5, 2010, the evidence is that OPG had already decided, before the letter was received, to forgo any rate increase for January and February 2011 and to delay the recovery of the tax loss variance account. The first adjustment represents a reduction in impact on ratepayers, but not necessarily a reduction in costs: OPG may choose to absorb the forgone revenues without reducing expenditures; it may defer costs to a later period; and for some of the largest projects (Niagara Tunnel, Pickering B Continued Operations and Darlington Refurbishment) the costs are captured through variance accounts in any event. The second adjustment is no reduction at all, merely a delay. OPG took no further or direct action in response to the Minister's May 5, 2010 letter. The business units were not even requested to consider the matter. The Board finds this response surprising. At a minimum, the Minister's letter indicates that the shareholder believed additional savings were possible. The Board would therefore have expected the company to look for further genuine savings. OPG has described what in its view are substantial reductions already included in the application, for example the plan over plan reduction of $85 million. The Board concludes that while this reduction does represent a genuine step towards cost control, it is an exaggeration to call it "savings". Most consumers would reasonably expect "savings" to mean a reduction over what is currently being paid. This is what the Minister requested and this is what OPG has largely failed to deliver.

The Board agrees that OPG has an obligation to consider the economic climate, including trends in electricity costs and consumers' ability to pay, in its business planning activities. A consideration of all aspects of the business climate is part of appropriate business planning. The Board does not agree, however, that OPG has an *obligation* to adjust its plan in response to the external environment. OPG is correct that it cannot control other aspects of consumers' electricity bills. This larger context is for the Board to consider in setting just and reasonable rates, and in particular, in considering whether OPG's forecast costs are reasonable. (This is discussed further below.) While OPG could certainly have proposed cost reductions in light of the economic climate (for example, a reduced return on equity), its *obligation* is to plan taking account of the requirements of its business and to propose payment amounts which represent recovery of an efficient and reasonable level of costs.

2.2 Bill Impacts

OPG estimated that the proposed payment amounts and riders result in an average increase of 6.2% from current payment amounts and riders. The increase represents

an increase of approximately 1.7% or $1.86 on the typical residential customer's bill. OPG noted that the current payment amounts have been in place for almost three years by the time new payment amounts come into effect on March 1, 2011, and accordingly the increase OPG is seeking amounts to approximately 2% per year.

OPG argued, "To the extent other forces impact this bill, it would be both unfair and a legal error to reduce OPG's just and reasonable payment amounts to account for those external affects."[3] OPG further argued that it was entitled to recover all prudently incurred costs, which it described in the following way:

> Expenditures are deemed to be prudent in the absence of reasonable grounds to suggest the contrary. Only costs that are found to be dishonestly incurred, or which are negligent or wasteful losses, may be excluded from the legitimate operating costs of the utility in determining the rates that may be charged.[4]

OPG concluded that total bill impacts should be considered by the Board through the integrated policy framework announced on October 27, 2010 (the Renewed Regulatory Framework).

PWU supported OPG's position. PWU agreed that the Board's statutory objective is to protect the interests of consumers, but pointed out that the Board must also respect the adequacy, reliability and quality of electricity services, as noted in the second statutory objective:

> 2. To promote the economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

PWU submitted that the Board has no authority to consider factors beyond OPG's control, if it finds OPG's costs are just and reasonable. PWU argued that it is inappropriate to consider costs over which the Board has no jurisdiction, such as the Global Adjustment Mechanism and the Harmonized Sales Tax.

PWU also asserted that the cost of generation from the prescribed facilities is among the lowest cost generation available to Ontario consumers. PWU submitted that

[3] Argument in Chief, p. 5.
[4] Reply Argument, p. 9.

maximizing the value of OPG's prescribed facilities will help to mitigate bill increases related to higher priced supply that would replace production from the prescribed facilities. PWU also submitted that the Board needs to consider intergenerational equity and that there is an impact on future ratepayers if work is deferred to mitigate bill impacts for today's ratepayers.

SEC argued that the 6.2% increase masks the true extent of the increases OPG proposed. SEC submitted that the revenue requirement reductions related to the Darlington Refurbishment Project should not be implemented and that additional costs related to pension and other post employment benefits should not be deferred. When these factors and the impact of the tax loss variance account balance are taken into account, SEC concluded that the increase over current payment amounts is 13.1%, a decrease of 4.7% for hydroelectric and an increase of 23.0% for nuclear. OPG responded that SEC's analysis is not an "apples to apples" comparison and noted that even SEC admitted that not all the amounts are directly comparable. OPG argued that SEC had understated the current payment amounts by not accounting for the EB-2008-0038 decision (related to the tax loss variance account), and that SEC overstated the test period payment amounts by including post test period amounts.

CCC and CME submitted that the Board should consider total bill impact in its determination of payment amounts. CCC noted that the government's "2010 Ontario Economic Fiscal Review" stated that electricity prices are expected to rise by 46% over the next five years. CME referred to the evidence that it filed in the proceeding, an analysis by Aegent Energy Advisors, which concluded that total costs for non-residential customers would rise by 47% to 64% over the next five years and that the increase for residential customers would be 38% to 47%.

CME submitted that the Board's statutory objective in section 1(1)1 of the Act demands that total bill impact evidence be considered. CCC argued similarly that the Board is legally obligated to take total bill impact into consideration when determining the payment amounts. CCC referred to the decision of the Supreme Court of Canada in the Northwestern Utilities Ltd. case in which the court stated:

> The duty of the Board was to fix fair and reasonable rates; rates which, under the circumstances, would be fair to the consumer, on the one hand

> and which, on the other hand, would secure to the company a fair return for the capital invested.[5]

Both CCC and CME noted that the Board recognized the need to consider total bill impact when setting rates in the Board's decision in the Hydro One Networks Inc. ("Hydro One") distribution rates case, EB-2009-0096:

> …the Board must take into account the overall increase and prospect of further increases in the commodity portion of the bill. While these charges are outside of the control of the applicant, they are no less real for customers. In giving effect to the Board's objective to protect the interests of consumers the Board cannot ignore the overall impacts on customers.[6]

CCC submitted that it does not take issue with allowing OPG a fair return on its capital, but stated that the Board must first determine the prudent and acceptable level of investment and then allow OPG a fair return.

CCC argued that the Board's policy initiative (Renewed Regulatory Framework) and the Ontario Clean Energy Benefit rebate do not relieve the Board of its obligation to consider total bill impact in its determination of payment amounts. Similarly, CME stated that the policy initiative does not relieve the Board from considering CME's evidence on bill impacts. CME reported that the majority of its members are either too large to quality for the Ontario Clean Energy Benefit or too small to qualify for benefits available to large consumers. CME stated that if care is not taken in managing increases in electricity prices, these manufacturers are likely to leave Ontario.

OPG responded that parties seeking reductions to OPG's application are doing so on the basis that aspects of the electricity bill over which OPG has no control are rising. OPG argued that the parties overstate the jurisdiction of the Board and that the arguments are really more in the nature of complaints relating to legislative and policy choices made by the Province.

OPG argued that the decision of the Supreme Court of Canada in the Northwestern Utilities case provided for a fair return to the company for the capital invested. OPG also noted that the Board's objectives include not only the protection of consumer interests but also facilitating a financially viable electricity industry. OPG argued that fair

[5] *Northwestern Utilities Ltd. v. Edmonton (City)*, [1929] S.C.R. 186 at pp. 192-193. ("Northwestern Utilities")
[6] Decision with Reasons, EB-2009-0096, April 9, 2010, p. 13.

return to a utility is comprised of two legal entitlements: the right to recover all prudently incurred costs and the right to a fair return on invested capital.

With respect to prudently incurred costs, in OPG's view, only costs that are found to be dishonestly incurred, or which are negligent or wasteful losses may be excluded. OPG referred to the prudence standard in the Enbridge Gas Distribution Inc. decision, RP-2001-0032:

- Decisions made by the utility's management should generally be presumed to be prudent unless challenged on reasonable grounds.
- To be prudent, a decision must have been reasonable under the circumstances that were known or ought to have been known to the utility at the time the decision was made.
- Hindsight should not be used in determining prudence, although consideration of the outcome of the decision may legitimately be used to overcome the presumption of prudence.
- Prudence must be determined in a retrospective factual inquiry, in that the evidence must be concerned with the time the decision was made and must be based on facts about the elements that could or did enter into the decision at the time.[7]

OPG referred to the Board's decision on Hydro One transmission rates, EB-2008-0272, which was made near the bottom of the economic downturn, and noted that the Board stated that it would be inappropriate to "arbitrarily reduce spending in direct response to the economic downturn."[8]

With respect to the fair return standard, OPG referred to the decision of the Supreme Court of Canada in the Northwestern Utilities case:

> By a fair return is meant that the company will be allowed as a large return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise.[9]

[7] Decision with Reasons, RP-2001-0032, December 13, 2002, p. 63.
[8] Decision with Reasons, EB-2008-0272, May 28, p. 4.
[9] *Northwestern Utilities*, pp. 192-193.

OPG also cited the Federal Court of Appeal's decision in *TransCanada Pipelines v. National Energy Board*, in which the court agreed that the approved rates will enable the company to earn a fair return and is not influenced by any resulting rate impact on customers.[10] OPG also noted that the *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities*, EB-2009-0084, states that meeting the fair return standard is a legal requirement.

Board Findings

Throughout this Decision the Board has rendered findings on the reasonableness of OPG's forecast costs and revenues, and in some cases on the prudence of expenditures which were in excess of prior forecasts. The Board has made adjustments to OPG's proposals in a number of areas. The overall effect of this Decision is a reduction in the revenue requirement from that originally requested by OPG and lower payment amounts than requested and a reduced bill increase for customers. The detailed calculation of the payment amounts will be done by OPG as part of the process of completing the Payment Amounts Order, but the Board estimates that the increase will be in the order of 1%.

The Board has broad discretion to adopt the mechanisms it judges appropriate in setting just and reasonable rates. This is clearly established in O. Reg. 53/05 and the Act. O. Reg. 53/05 states "the Board may establish the form, methodology, assumptions and calculations used in making an order that determines payment amounts for the purpose of section 78.1 of the Act" subject to certain rules which are specified in O. Reg. 53/05. Section 78.1 states "the Board may fix such other payment amounts as it finds to be just and reasonable, (a) on application for an order under this section, if the Board is not satisfied that the amount applied for is just and reasonable…" With these authorities, the Board may take account of a broad suite of factors that affect the company and factors that affect consumers. Both considerations are relevant in determining just and reasonable payment amounts. For example, the Board may consider evidence on economic conditions and factors influencing other aspects of electricity rates. These sorts of factors may well be relevant in terms of deciding the appropriate pacing or level of expenditures. The Board must be satisfied that the rates are just and reasonable and it must consider all evidence that it finds relevant for that purpose. For the current proceeding, the Board finds that evidence regarding the economic situation and the trend in overall electricity costs is a relevant consideration,

[10] (2004), 319 N.R. 172 (FCA).

along with a variety of other factors (such as inflation rates, interest rates, legislation, business needs, benchmarking results).

OPG and PWU would have the Board constrain its consideration of the various spending proposals to a very narrow examination based on the presumption that all proposed expenditures are reasonable unless proved otherwise. In the words of OPG, "Only costs that are found to be dishonestly incurred, or which are negligent or wasteful losses, may be excluded from the legitimate operating costs of the utility in determining the rates that may be charged." The Board disagrees. When considering forecast costs, the onus is on the company to make its case and to support its claim that the forecast expenditures are reasonable. The company provides a wide spectrum of such evidence, including business cases, trend analysis, benchmarking data, etc. The test is not dishonesty, negligence, or wasteful loss; the test is reasonableness. And in assessing reasonableness, the Board is not constrained to consider only factors pertaining to OPG. The Board has the discretion to find forecast costs unreasonable based on the evidence – and that evidence may be related to the cost/benefit analysis, the impact on ratepayers, comparisons with other entities, or other considerations.

The benefit of a forward test period is that the company has the benefit of the Board's decision in advance regarding the recovery of forecast costs. To the extent costs are disallowed, for example, a forward test period provides the company with the opportunity to adjust its plans accordingly. In other words, there is not necessarily any cost borne by shareholders (unless the company decides to continue to spend at the higher level in any event). Somewhat different considerations will come into play when undertaking an after-the-fact prudence review. In the case of an after-the-fact prudence review, if the Board disallows a cost, it is necessarily borne by the shareholder. There is no opportunity for the company to take action to reduce the cost at that point. For this reason, the Board concludes there is a difference between the two types of examination, with the after-the-fact review being a prudence review conducted in the manner which includes a presumption of prudence.

The Board has considered the overall impact of the various adjustments it has made to the requested amounts and concludes that the resulting new payment amounts are just and reasonable in light of all relevant circumstances. The overall increase is approximately 1%.

3 REGULATED HYDROELECTRIC FACILITIES

3.1 Production Forecast

OPG's historic hydroelectric production and test period hydroelectric production forecast are summarized in the following table.

Table 4: Hydroelectric Production

TWh	2007	2008	2009	2010	2011	2012
Forecast	17.5	17.4	18.5	19.3	19.4	19.0
Actual	18.2	19.0	19.4			
Variance	0.7	1.6	0.9			
SBG in Forecast				(0.2)	(0.5)	(0.8)

Source: Exh. E1-1-2, Table 1

OPG uses computer models to derive water flow and production forecasts for the regulated hydroelectric facilities. OPG states that the models have proven to be 90% accurate and that statistical analysis indicates no bias. The hydroelectric water conditions variance account captures the revenue and cost impact of the difference between forecast and actual water conditions.

Surplus baseload generation ("SBG") occurs when electricity production from baseload facilities exceeds Ontario demand. This situation is in many cases alleviated by spilling water at the Niagara plants. OPG stated that in 2009 SBG was more prevalent than it has been historically and, as a result, OPG forecast significant SBG in the test period whereas in the past no specific provision was made for this factor. SBG was negligible in 2008, and for 2009 it was estimated at 0.6 TWh, of which 0.19 TWh was attributable to the regulated hydroelectric facilities.[11]

The SBG forecast for 2010, 2011 and 2012 is 0.2 TWh, 0.5 TWh, and 0.8 TWh, respectively. OPG's SBG forecast is based on publicly available information related to other market participants and its own market intelligence. Relevant factors include potential curtailment from other generators, exports, expected river flows, timing for re-commissioning of Bruce Nuclear facilities, etc. OPG identified expanded wind

[11] Exh. L-2-19.

generation as the primary driver for this forecast in the test period. The test period SBG forecast has a revenue requirement impact of $32.5 million.[12]

OPG explained that the IESO is responsible for mitigating SBG, but when SBG is anticipated OPG establishes offer prices so that any output reductions are based on market economics and a variety of operational constraints. OPG stated that historically it has used all available hydroelectric storage prior to spilling water, but also noted that its use of the Pump Generating Station ("PGS") is always based on the comparative economics of the pump/generate cycle in terms of the associated market prices.

SBG was the only aspect of the hydroelectric production forecast on which parties provided submissions. The PWU supported the inclusion of SBG in the production forecast. Board staff, AMPCO, CME, CCC, SEC and VECC submitted that SBG should not be included in the production forecast, but proposed that a variance account be used. The primary reason cited was the difficulty in forecasting SBG, and most parties noted that the expected 2010 SBG will be considerably lower than originally forecast. The forecast for 2010 was originally 0.2 TWh, but the year-to-date level (as of October 3, 2010) was only 0.0204 TWh. OPG maintained that this situation was due to lower than normal water flows during periods when SBG had been expected and cautioned that higher SBG was still expected before the end of the year.

OPG acknowledged in its Argument in Chief that a variance account for this factor might be appropriate. Board staff submitted that variations in production due to SBG should be treated in a manner similar to variations in water conditions and that OPG should record SBG production losses (ordered by IESO or of its own initiative) in a deferral account. Other intervenors supported the use of a variance account, including VECC, SEC, AMPCO, CCC, CME and PWU. SEC, supported by AMPCO, submitted that only SBG directed by the IESO should be charged to the account.

CME supported use of the account for tracking purposes but cautioned that it might challenge any amount in the account on the basis that "it is questionable as to whether an utility owner that causes adverse impacts on its own utility [through procurement decisions] can recover the costs of those adverse impacts in regulated rates."[13]

[12] Exh. L-5-24.
[13] CME Argument, para. 174.

In reply, OPG argued that it would be inappropriate to exclude SBG from the forecast as this would be inconsistent with the treatment of other factors which are included in the forecast. OPG went on to argue that if the Board is not prepared to accept OPG's original test period forecast of 1.3 TWh, it should at least accept a forecast of 0.4 TWh, which corresponds to the level in 2009 and the forecast for 2010.

OPG indicated its support for a variance account, but emphasized that it should measure variances from the best forecast of SBG. OPG further submitted that the basis for the account should be a modified version of that proposed by Board staff. OPG proposed that the reconciliation be based on:

> …any IESO order or instructions (if applicable), general market conditions (e.g. total demand, total baseload, total supply) and actual production reports from the SGB-affected generation units that show deviations from production that are contemporaneous with SBG conditions.[14]

OPG maintained that SEC and AMPCO's proposal was unworkable because SBG is not normally managed through IESO directives. OPG also argued that CME's approach would inappropriately penalize those resources within the market that help to mitigate the condition.

Board Findings

The only issue the Board needs to address is the inclusion of SBG in the production forecast and whether a variance account is appropriate.

The evidence is clear that SBG was a significant factor in 2009 and is likely to be so again in 2011 and 2012 with the expected increase in wind generation and the expected return to service of refurbished Bruce Nuclear facilities. The Board, however, does not find that the evidence supports a forecast of 1.3 TWh. This is a significant increase over the 2009 actual and even the 2010 forecast. Added to this is the fact that 2010 is now expected to have much lower SBG. The Board accepts that this is in large part due to lower water levels, but the Board finds that there is insufficient evidence to support a forecast of 1.3 TWh for 2011 and 2012. The Board concludes that rather than setting a forecast, a better approach will be to capture the impacts of all SBG through a variance account, with no allowance built into the forecast. This approach will bring transparency to the level of SBG and will assist in assessing whether OPG has taken adequate steps to mitigate the impact of SBG (which is discussed further below).

[14] Reply Argument, p. 27.

The Board will establish a variance account for SBG, with SBG to be measured on the basis proposed by OPG. The Board will not adopt the proposal of SEC and AMPCO that SBG be limited to instances where the IESO directs OPG to take action. The Board accepts OPG's position and evidence that SBG is currently addressed through market mechanisms as well as IESO orders or instructions. The Board has no evidence regarding the implications of requiring OPG to act only on the basis of IESO directives, but the Board is concerned that such an approach would not allow an adequate consideration of the other factors involved (safety, environmental, water level, economics) which the evidence shows are taken into account in responding to SBG conditions.

The evidence indicates that OPG uses the PGS to mitigate the impact of SBG if the market price spreads are large enough to incent OPG to deploy the PGS. The Board will review the use of PGS for this purpose when reviewing the amounts in the account. This is addressed further in Chapter 11 in the section on the Hydroelectric Incentive Mechanism.

The Board does not need to address at this time the issue raised by CME in relation to considerations which may arise at a future disposition of the account. The Board will review the account balance for prudence prior to determining disposition, as is the Board's normal practice.

3.2 Operating Costs

Historic and test period operating costs for the regulated hydroelectric facilities are summarized in the following table.

Table 5: Operating Costs Summary – Regulated Hydroelectric ($ million)

Cost Item	2007 Actual	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
OM&A:						
Base OM&A	$78.6	$53.9	$61.5	$61.8	$68.7	$62.2
Project OM&A	7.0	14.6	9.1	5.3	9.7	10.0
Allocation of Corporate Costs	21.9	26.3	24.9	25.1	24.8	26.3
Allocation of Centrally Held Costs	16.1	14.6	17.4	20.3	22.9	25.5
Asset Service Fee	2.3	2.5	2.6	2.0	2.1	2.0
Total OM&A	$125.9	$111.8	$115.5	$114.4	$128.2	$125.9
Gross Revenue Charge	$241.8	$253.5	$259.6	$257.2	$257.1	$252.2

Source: Exh. F1-1-1

Base OM&A and project OM&A costs have been stable historically, and the test period forecast represents a small increase over prior years actual spending. Allocated costs are rising; these costs are addressed in Chapter 6.

Gross Revenue Charges ("GRC") are payments made by OPG to the province. These payments are made by owners of hydroelectric facilities under section 92.1 of the *Electricity Act, 1998*. The GRC consists of a property tax component and a water rental component. The latter is determined by O. Reg. 124/02 under the *Electricity Act, 1998* and is a function of energy produced and the rate set by the Provincial Government.

The hydroelectric business uses three main sources for benchmarking: EUCG Inc., Canadian Electrical Association ("CEA") and Navigant Consulting. OPG maintained that the individual stations and the regulated facilities in aggregate perform generally better than EUCG and CEA benchmarks in the areas of availability and reliability. OPG's evidence is that the OM&A unit energy cost benchmarking demonstrates that the regulated hydroelectric facilities are cost competitive. OPG provided the results of the EUCG and Navigant benchmarking in support of its position. While there are differences between stations, the aggregate plant result for OM&A cost for 2008 was in the first quartile in both the EUCG and Navigant benchmarking studies. OPG's expectation is that the rankings will be similar for the test period.

There were no submissions objecting to hydroelectric operating costs except for the OM&A related to the Saunders Visitor Centre. This matter is addressed in the next section. There were no submissions on the regulated hydroelectric benchmarking results presented in the evidence. OPG submitted that the test period OM&A budget is reasonable and should be approved, subject to the Board's findings on compensation and the Visitor Centre.

Board Findings

The Board finds the test period costs to be reasonable. The largest component of the hydroelectric costs is the Gross Revenue Charge, and the Board has no authority with respect to this rate. Given the Board's finding that the production forecast will not be reduced for SBG, the Board will increase the provision for the Gross Revenue Charge by $6.6 million in 2011 and $11.5 million in 2010.[15]

[15] Exh. L-5-24.

The Board further finds that the benchmarking methodology and results are reasonable and notes that they have been accepted without challenge by all parties. This evidence supports the conclusion that the hydroelectric business has achieved an acceptable level of efficiency and that the OM&A costs are reasonable. The OM&A costs are also reasonable in light of the trend in actual spending.

3.3 Capital Expenditures and Rate Base

OPG's forecasted capital expenditures for the regulated hydroelectric facilities total $327.9 million and $235.7 million in 2011 and 2012, respectively. A break-out by major grouping, including historical planned and actual amounts, is set out in the following table.

Table 6: Hydroelectric Capital Expenditures

($ million)	2007 Actual	2008 Approved	2008 Actual	2009 Approved	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Niagara Plant Group	$9.9	$33.6	$24.8	$42.2	$25.6	$36.2	$30.7	$30.9
Niagara Tunnel	63.9	170.6	131.3	346.8	213.5	241.8	288.0	199.0
Saunders GS	10.5	4.6	4.0	6.6	11.9	17.3	9.2	5.8
TOTAL	**$84.3**	**$208.8**	**$160.1**	**$395.6**	**$251.0**	**$295.3**	**$327.9**	**$235.7**

Source: Exh. D1-1-1, Table 1

OPG is seeking approval of regulated hydroelectric in-service additions to rate base of $60.9 million, $42.9 million and $51.5 million for 2010, 2011 and 2012, respectively. OPG submits that its capital spending has been prudent and the in-service additions to rate base should be approved. OPG's historical and proposed rate base for the test period is set out in the following table.

Table 7: Hydroelectric Rate Base

($ million)	2007 Actual	2008 Approved	2008 Actual	2009 Approved	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Total Gross Plant	$4,396.5	$4,433.2	$4,416.8	$4,480.6	$4,438.6	$4,485.0	$4,538.0	$4,585.5
Total Accum. Dep.	507.8	570.2	569.5	633.1	631.2	693.6	756.7	820.2
Total Net Plant	3,888.7	3,857.8	3,847.3	3,847.5	3,807.4	3,791.4	3,781.3	3,765.3
Cash Working Capital	21.8	21.8	23.6	21.8	26.0	23.6	21.5	21.5
Materials & Supplies	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
Rate Base	**$3,911.1**	**$3,880.2**	**$3,871.5**	**$3,869.9**	**$3,834.0**	**$3,815.7**	**$3,803.4**	**$3,787.4**

Source: Exh. L-1-2, Exh. B2-1-1 Table 1, Exh. B2-2-1 Table 1 and Exh. B2-5-1 Table 1

Intervenors and Board staff made submissions on three specific projects: the Niagara Tunnel Project, the Sir Adam Beck 1 G9 Rehabilitation and the St. Lawrence Power Development Visitor Centre.

PWU submitted that OPG is under investing in hydroelectric assets.

Board Findings

The Board finds that the hydroelectric capital budget for projects coming into service during the test period is reasonable in that it is supported by the business cases. No party objected to this portion of the capital budget.

The Board is providing no explicit approval in this Decision for the capital budget associated with multi-year hydroelectric projects which do not come into service during the test period. Some issues were raised related to the Niagara Tunnel Project and the adequacy of OPG's budget, and those are addressed below.

The Board has also determined that no adjustments to the hydroelectric rate base are warranted. Intervenors raised objections to two specific projects, and those are addressed below.

3.3.1 Niagara Tunnel Project

The OPG Board of Directors approved the Niagara Tunnel Project in 2005. The cost was forecast at $985 million and the in-service date was late 2009. In May 2009, the OPG Board approved a revised cost of $1,600 million and a revised in-service date of December 2013. OPG provided a Business Case Summary for the project, dated May 2009 with its application. OPG plans to spend $288.0 million and $199.0 million on the project in 2011 and 2012, respectively. However, as the project will not come into service until 2013, no expenditures related to this project are included in the rate base proposed for the test period. OPG noted that the expenditures related to the Niagara Tunnel Project will be subject to section 6(2)4 of O. Reg. 53/05, and will be addressed at the time the expenditures are proposed for recovery through a payment amounts application.

The Board determined in Procedural Order No. 3 that it would only make prudence determinations with respect to projects or costs that close to rate base in the test

period.[16] As a result, intervenor submissions largely focused on the filing of ongoing reports concerning the Niagara Tunnel Project.

AMPCO submitted that the Board should order OPG to produce an annual monitoring report on the tunnel project that is comparable to the report OPG will produce for the Darlington Refurbishment Project. CCC submitted that the Board should require OPG to provide the Project Execution Plan reports (similar to what was filed in the undertaking response JX2.4) until the project is brought forward for approval. In CCC's view, these reports would assist the Board in the final assessment of the project. CCC noted that OPG intends to regularly review and update the project execution plan, and that this reporting will be provided to the OPG Board of Directors and the shareholder.

SEC observed that there will likely be internal OPG reporting on the tunnel project more frequently than once a year. On this basis, SEC submitted that it would be reasonable for the Board to require a tunnel project status report in June 2011 and June 2012. SEC suggested that if the reports indicated a significant cost overrun the Board could call OPG in for review if it was apparent at the time that OPG would not be filing a payment amounts application in 2013. SEC saw further value in the proposed reporting since the Board, if it were aware of cost over-runs in 2011, could hold a "mini-hearing" on the matter in 2011.

OPG responded that the reporting suggested by the parties would be of limited value because the tunnel is expected to be in service in 2013. OPG further argued that the proposed reporting would add unnecessary regulatory burden and cost. OPG noted that it will make a comprehensive filing on the project in the first quarter of 2012 as part of its next payment amounts application and argued that there is too short a time frame for interim reporting.

OPG also objected to filing updated copies of the Project Execution Plan because the Board does not have the same role as the OPG Board in overseeing and managing the project. OPG submitted that reporting to the Board should be focused on the specific

[16] Procedural Order No. 3, dated July 21, 2010, p. 11 "The Board will retain the current statement of issue 4.2 including the term "appropriate" and the reference to business cases. The Board will only make prudence determinations with respect to projects or costs that close to rate base in the test period. While the Board agrees that it would be appropriate to review other aspects of the capital budgets, the Board expects that this review will be more in the form of a status update. The Board does not intend to make any form of quantitative or qualitative finding with respect to projects and costs which close to rate base in the period after the test period."

information required to efficiently monitor and regulate OPG's prescribed facilities and should not be required just because it is provided to OPG's Board of Directors.

OPG also objected to mid-year reporting for the purposes of allowing the Board to hold a mini-hearing. OPG submitted that there is no legal basis for the Board to assume a quasi-project management role during the course of a major project; nor is it a proper role for the Board. OPG also suggested it would create a conflict with the Board's later duty to determine the prudence of the expenditures.

Board Findings

The Board will not require additional reporting on the status of the Niagara Tunnel Project prior to OPG's next payments case. The Board does not intend to manage the project, nor will it to conduct any sort of intermediate review, or "mini-hearing". The appropriate course of action is for the Board to conduct a thorough prudence review at the time that OPG proposes to add the project to rate base. The Board will expect OPG to file Project Execution Plans, as well as any other progress reports completed over the duration of the project, at the time of the prudence review.

3.3.2 Investment in Hydroelectric Assets

PWU submitted that OPG's proposed hydroelectric capital and OM&A budgets are appropriate but minimally so. PWU suggested that its own analysis indicates that the test years are in a period when hydroelectric reinvestment levels should be on the rise given the age of the assets, however investment and rate base levels are declining from 2010 levels. PWU submitted that OPG should be directed to file information on the demographics of the regulated hydroelectric assets. OPG replied that this proposal should be rejected because it would require complex analysis and the value of the analysis has not been demonstrated.

Board Findings

The Board will not direct OPG to perform the asset demographics analysis proposed by PWU. PWU asserted that spending should be increasing based on the age of the assets. Spending, however, is primarily related to the condition of the assets, and while age is a contributing factor to asset condition, it is by no means the only one. However, it is up to OPG to provide the relevant evidence to support its proposed expenditures and to demonstrate that it is making adequate investments to maintain an appropriate level of reliability. The Board notes that there is no evidence that reliability has been compromised by the level of expenditures for the test period.

3.3.3 Sir Adam Beck I G9 Rehabilitation

The G9 rehabilitation project includes replacement of the generator, rehabilitation and upgrade of the turbine, and a new transformer. The evidence indicated that OPG expected to complete the project in December 2010 at a cost of $32.1 million.

AMPCO pointed out that in the previous proceeding, EB-2007-0905, the projected cost was $30 million with an in-service date of 2009. AMPCO submitted that the increase has not been adequately justified and that the rate base addition should be reduced by $1 million.

OPG responded that the project is on schedule and within the budget presented in the business case summary filed in the current application and that AMPCO did not demonstrate that the costs associated with the project were imprudent. OPG pointed out that the information that AMPCO quoted was at the concept stage, and was later updated at the business case summary stage.

Board Findings

The Board finds that AMPCO's proposal to remove $1 million from rate base is unwarranted. The cost overrun is $2 million, or about 7% in relation to the original project budget. The Board finds that the magnitude of this overrun is not sufficient to suggest mismanagement or imprudence.

3.3.4 St. Lawrence Power Development Visitor Centre

The St. Lawrence Power Development Visitor Centre, which opened in August 2010, is adjacent to the R.H. Saunders Generating Station located in the city of Cornwall. OPG's Board approved the project with a budget of $12.6 million in March 2009. OPG described the purpose of the Visitor Centre as providing an important venue for OPG to deliver its hydroelectric communications (e.g., water safety) while improving community and aboriginal support for continued operation of OPG's second largest hydroelectric generating station.

Energy Probe, Board staff, CCC, CME, AMPCO and VECC opposed the inclusion of about $12 million in hydroelectric rate base and about $0.5 million OM&A for the Visitor Centre, for the following reasons:

- It is inappropriate for electricity ratepayers to pay for expenditures and investments whose purpose is to promote OPG's brand and whose main focus appears to be regional tourism and local municipal relations;
- Water safety messaging is a minor element of the centre and the unregulated hydroelectric segments of OPG benefit from the centre but no costs are recovered from these segments;
- There are more effective ways to promote the Waterways Public Safety campaign;
- Although the project is characterized by OPG as sustaining, there is no direct contribution to the production of electricity at the R.H. Saunders Generating Station; and
- OPG's mandate is to provide electricity and not educational and cultural opportunities.

SEC supported the inclusion of the Visitor Centre in OPG's hydroelectric rate base. SEC believes that the wrong question has been asked to assess the appropriateness of the proposed rate base treatment. In SEC's view, the question that should be asked is whether the project is a normal and usual part of the business of generating electricity from the Saunders facility and just good corporate citizenship, not whether the Visitor Centre will produce more electricity at the facility. SEC also stated that the Visitor Centre is virtually entirely about the Saunders facility and therefore any benefit to the unregulated business is incidental.

OPG argued that the parties opposing the inclusion of the Visitor Centre in rate base had too narrow a view of the purpose of the centre and that the views of parties were not reflective of the realities of operating a major power plant in the modern world. OPG likened the Visitor Centre to administration buildings, storage facilities and parking lots, which are accepted as necessary infrastructure even though they do not directly generate electricity. OPG also noted that the aboriginal relations function is included in base OM&A expense and that the Visitor Centre will strengthen the relationship with the Mohawks of Akwesasne. OPG also argued that its position is consistent with the Memorandum of Agreement with its shareholder requiring OPG to operate in accordance with the highest corporate standards in the areas of social responsibility and corporate citizenship. OPG also objected to having some of the cost allocated to its unregulated hydroelectric business as the Visitor Centre focuses on themes local to the Saunders station.

Board Findings

The Board agrees with OPG and SEC that it is reasonable to include the capital cost of the Visitor Centre in rate base for the regulated hydroelectric facilities. The Saunders generating station is a major corporate facility in the Cornwall area, and it is reasonable for the operation of the facility to promote good relations with the surrounding community. The Board also notes that the Visitor Centre was built, in part, to replace the one that OPG was required to close for security reasons. The Board agrees that it would be inappropriate to allocate any of the costs to the non-regulated facilities as the focus is mainly on local issues and the local facility. As the Board is making no reduction to rate base for this item, there will also be no reduction to the associated OM&A costs.

3.4 Other Revenues

OPG earns revenue from a number of sources other than through the regulated payment amounts for hydroelectric generation. These sources of other revenue include ancillary services, segregated mode of operations and water transactions.

The IESO purchases the following ancillary services from OPG: black start capability, reactive support/voltage control service, automatic generation control and operating reserve. A forecast of the revenues from ancillary services is applied as an offset to the hydroelectric revenue requirement. Differences between the forecast and actual revenues are recorded in the Ancillary Service Net Revenue Variance Account – Hydroelectric.

Segregated mode of operation ("SMO") transactions occur at the Saunders GS. Units at Saunders can be segregated, when pre-arranged, to serve the Hydro Quebec control area. A high voltage DC intertie between Ontario and Quebec began commercial service in 2009 and, as a consequence, SMO revenues have declined. The SMO forecast in the previous case was based on a 3 year historical average. The test period SMO forecast is based on SMO results for the second half of 2009.

Water transactions ("WT") between OPG and the New York Power Authority allow the two parties to use a portion of the other's share of water for electricity generation. In 2009, low electricity market prices reduced WT revenues. As in the case of SMO, the WT forecast in the previous case was based on a three-year historical average. OPG has proposed a test period forecast based on the actual net revenues in 2009.

The following table summarizes historic and test period hydroelectric other revenue.

Table 8: Other Revenues – Regulated Hydroelectric ($ million)

Revenue Source	2007 Actual	2008 Budget	2008 Actual	2009 Budget	2009 Actual	2010 Budget (1)	2011 Plan	2012 Plan
Ancillary Services	$35.6	$32.4	$41.2	$33.1	$42.5	$39.1	$38.3	$39.5
Segregated Mode of Operation	4.4	5.0	13.7	6.6	3.6	6.6	1.5	1.6
Water Transactions	4.3	5.2	8.8	6.9	4.9	6.9	5.1	5.2
Total	**$44.3**	**$42.6**	**$63.7**	**$46.6**	**$51.0**	**$52.6**	**$44.9**	**$46.2**

Note 1: The figures for Segregated Mode of Operations and Water Transactions for 2010 are the amounts imputed by the Board for 2009 (EB-2007-0905). They do not reflect the revenues OPG expects to earn in 2010.

Source: Exh. G1-1-2, Table 1

Both CME and VECC submitted that OPG's test year forecasts for SMO and WT should be adjusted. VECC argued that the current Board approved methodology incorporates actual performance over time and provides OPG with an incentive to increase revenues. VECC also noted that in 2008, OPG earned $12.8 million in excess of the forecast amount for SMO and WT. VECC submitted that applying the current Board approved methodology for forecasting SMO and WT would increase other revenue by $13 million. CME also supported retaining the existing forecast methodology. In the alternative, CME submitted that the Board should establish a revenue sharing mechanism that credits 75% of the net revenue to ratepayers, citing similarities to sharing mechanisms in the gas industry.

In reply, OPG noted that it had a net loss for SMO of almost $1 million for the 12 months up to August 2010, and that neither CME nor VECC challenged the impact of the DC intertie or depressed market prices. OPG agreed that a three-year rolling average will eventually reflect OPG's net revenues, but that in the interim OPG will have returned to ratepayers millions of dollars more than it has earned on SMO and WT.

With respect to VECC's observation about 2008 revenue being higher than forecast, OPG replied that a bad forecast is not a justification for using a methodology which OPG considers wrong. OPG stated that there is no evidentiary basis for the revenue sharing mechanism suggested by CME.

OPG concluded that its proposed methodology should be accepted, but that beginning in 2013, it would have no objection to returning to the three-year average methodology.

Board Findings

The Board finds that the forecast test period revenue for ancillary services is appropriate. No party objected to this forecast, and O. Reg. 53/05 requires the use of a variance account to capture the actual results in any event.

In the last proceeding the Board approved a rolling three-year average for the purposes of forecasting SMO and WT, with the variance borne by OPG. The Board finds that this approach provides reasonable results over time as periods of under-performance will be balanced by periods of over-performance. The Board also agrees with VECC that the strength of this approach is that it embeds actual performance while at the same time providing the company with an incentive to increase revenue. For the structure to be effective, however, it must be retained over time. For this reason, the Board is inclined to retain this approach. The exception to this would be in the case where there has been a fundamental or structural change in circumstances which would render a forecast based on historical performance unreasonable. In the current case, the Board concludes that a rolling three-year forecast remains appropriate for WT, but is not appropriate for SMO.

For SMO, the Board concludes that the operation of the DC intertie with Quebec represents a structural change that renders past experience unreliable for purposes of forecasting future performance. For this reason, the Board will accept OPG's forecast for 2011 and 2012. The Board will revisit this issue in the next proceeding, with the expectation that a return to a rolling average forecast will again become appropriate. The Board notes OPG's acceptance of this approach.

For WT the Board finds that the revenue forecast should be based on the three-year average for 2007, 2008 and 2009. This results in a revenue forecast of $6 million per year, or an increase of $1.7 million over the proposed level for the test period. OPG argues that this forecast does not adequately reflect the lower market prices of 2009 compared to 2008. The Board disagrees. The nature of a rolling forecast is that it takes into account all recent experience. Further, the Board finds that a year of lower market prices does not represent a structural change; market prices are by their nature variable. The Board concludes that there is no evidence to support a change to the forecasting methodology for WT.

The Board will not adopt the revenue sharing mechanism proposed by CME. The Board concludes that the best balance of benefits to ratepayers and incentives for OPG is under a structure where the revenue requirement includes a forecast based on historical experience and any variance is borne by OPG. This is the approach adopted by the Board in the last proceeding and it remains appropriate.

4 NUCLEAR FACILITIES

4.1 Production Forecast

Historic nuclear production and test period nuclear production forecasts are summarized in the following table.

Table 9: Nuclear Production (TWh)

	2007 Actual	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Darlington NGS	27.2	28.9	26.0	27.8	28.9	29.0
Pickering A NGS	3.6	6.4	5.7	6.6	7.4	7.7
Pickering B NGS	13.4	12.9	15.1	13.7	14.6	15.3
Forecast for Major Unforeseen Events	0.0	0.0	0.0	(2.0)	(2.0)	(2.0)
Total	**44.2**	**48.2**	**46.8**	**46.2**	**48.9**	**50.0**

Source: Exh. E2-1-1, Table 1

The production forecast of 48.9 TWh for 2011 and 50.0 TWh for 2012 was part of the 2010-2014 business plan approved by OPG's Board of Directors. This represents a total increase of 3.9 TWh over actual production in 2008 and 2009.

OPG establishes annual production forecasts for the individual nuclear units and an aggregated forecast for each station leading to an overall nuclear production forecast. The annual forecast is equal to the sum of the units' capacity multiplied by the number of hours in the year, less the number of hours for planned outages and forced production loses. The forecasts include allowances for uncertainty at the station level and the fleet level to recognize events which may not be predictable. OPG has forecast improved production performance across its fleet through reduced planned outage days and improvements in the forced loss rate ("FLR"). The FLR is an indicator of performance reliability. It is a measure of the percentage of energy generation during non-planned outage periods that a plant is not capable of supplying to the electrical grid because of forced production losses such as forced outages.

The forecast also includes 2.0 TWh in reduced production in each year for what OPG calls "major unforeseen events" ("MUE"). From 2005 to 2008, OPG's actual annual nuclear production forecast was less than the business plan level by approximately 3.5

TWh on average. OPG explained that the difference was largely due to forced outages and forced extensions to planned outages due to MUE. OPG's analysis indicated that on average more than 2.0 TWh was associated with MUE, and this experience formed the basis of OPG's test period forecast. The revenue requirement impact of the 2.0 TWh of MUE is $200 million in the test period.[17] Although the business plan includes the provision for MUE, OPG has established performance "stretch" targets for the nuclear business which are 2.0 TWh higher.

Most intervenors recommended that the Board deny the 2.0 TWh adjustment related to MUE. Board staff noted that OPG's nuclear division "stretch" target does not include the MUE adjustment. Several parties expressed concern that incentive payments for OPG management would be based on these "stretch" targets, while payment levels would be based on the lower production forecast.

CCC argued that the MUE adjustment had not been justified and noted that OPG's own witness stated, "we expect to get 50.9 [TWh] in 2011 and 52 [TWh] in 2012".[18] CME made similar arguments and took the view that OPG's evidence in support of the adjustment was extremely limited given the magnitude of the financial impact.

AMPCO noted that the 2011-2012 forecast, while higher than 2008-2009 actual, is lower than the 2008-2009 forecast in the prior proceeding. AMPCO submitted that it would be reasonable to expect that forecast production should improve following the vacuum building outages and the investment in performance improvements, including accounting for some additional outage related to the Pickering B Continued Operations project. AMPCO concluded:

> Having invested heavily in performance improvement, with the Board's approval in past 3 years, consumers have a reasonable expectation that forecasted production should improve, not decline relative to the forecast presented in the previous case, as OPG has suggested.[19]

CME also submitted that witness testimony suggests that OPG does not actually expect to suffer the loss for which it is seeking compensation. In CME's view:

[17] Exh. L-5-25.
[18] Tr. Vol. 6, p. 82.
[19] AMPCO Argument, para. 152.

> OPG cannot have it both ways. They cannot say on the one hand that it is more accurate to say that they will hit 48.9 TWh and 50.0 TWh, but then on the other say that they *expect* to actually hit 50.9 TWh and 52 TWh.[20]

In SEC's view, OPG has not presented evidence that past experience is a good predictor of the future. SEC submitted that, on the contrary, OPG has presented a great deal of evidence about programs and initiatives designed to improve future performance and evidence that for other aspects of the forecast the past is not a good predictor of the future.

PWU did not support the exclusion of the 2.0 TWh for MUE because in its view the result would be an unrealistically high production forecast.

OPG replied that no party questioned or contradicted that MUEs have occurred and are likely to occur in the future; nor did any party introduce evidence that OPG had overestimated the impact of MUEs. OPG noted that the MUE adjustment was less than the historical variance between forecast and actual production. OPG further argued that its approach was consistent with the position put forward by Board staff in the previous proceeding.

SEC also submitted that there should be an adjustment to reflect a change in the Darlington FLR from 1.5% to 1.0%. The historical FLR for Darlington is provided in the following table:

Table 11: Darlington Forced Loss Rate

Year	FLR (%)
2005	1.3
2006	3.2
2007	1.1
2008	0.7
2009	1.6
2010[1]	3.5
5 Year Average (2005-2009)	**1.6**

Note 1: Projection based on 8 months of data, Undertaking J6.5
Source: Exh. L12-30

[20] CME Argument, para. 187.

In SEC's view, an FLR of 1.0% is more reasonable because it is the four year average but removes the anomalous FLR of 3.2% in 2006. SEC estimated this would add between $7 million and $10 million to test period revenues. Board staff submitted that the Darlington FLR should be reduced to 1.1% for much the same reasons. OPG responded that the Darlington FLR was not based on historical average, but was based on recent performance and plant material condition, past and future investment to improve reliability and other performance initiatives.

Board Findings

The evidence is clear that the business plan approved by OPG's Board of Directors and upon which the application is based includes the 2.0 TWh adjustment for MUE. It is also clear that the nuclear business plan does not contain this adjustment – a difference which OPG characterizes as a "stretch goal" to go beyond the business plan.

In the words of one OPG witness:

> We are trying to drive our stations towards higher performance in producing generation for the company, as well as for the Province of Ontario. But because we always have these big one-time events that seem to be occurring, it would be inappropriate and inaccurate to submit a forecast without something like this in it.
>
> So that is why we are trying to drive our nuclear organization to better performance, but at the same time want to create a realistic and reliable forecast that the rest of the company and the IESO and everyone can rely upon.[21]

OPG also argued that "it is in the interest of the people of Ontario that OPG provide incentives to its employees [to] maximize production from the nuclear assets owned by the Province".[22] This benefit to the people of Ontario is presumably through greater quantities of available generation and higher revenues to the company if actual production exceeds forecast. However, this benefit is at the direct expense of ratepayers because the forecast (and therefore the payment level) ensures that the company is protected in the event the incentives are completely unsuccessful. Ratepayers would benefit directly from this incentive structure if all or some of the stretch goal was incorporated into the production forecast used for payment setting purposes. And as OPG acknowledges, the stretch goals have to be achievable to be

[21] Tr. Vol. 6, p. 83.
[22] Reply Argument, pp. 76-77.

effective. The testimony establishes that OPG does expect to achieve the higher forecast. The Board concludes a lower level of MUE should be adopted into the forecast because the evidence demonstrates that the target production levels are viewed as achievable and OPG expects to achieve them.

OPG's MUE forecast rests on the premise that because these unforeseen events have happened in the past they will happen again. OPG claims that no reduction in the level of these events can be expected as a result of the various performance improvement initiatives which have been implemented. The Board does not find this position to be substantiated by the evidence. There may well be events which are unforeseen, but the nuclear business plan, the benchmarking efforts, and forecast expenditures are all aligned with enhancing the reliability and *performance* of the nuclear units. While the Board accepts that there may continue to be significant events which have the effect of reducing production, the Board cannot accept the position that the level of these events will be unaffected by the full spectrum of performance improvements established by OPG. The Board further notes that the Memorandum of Agreement between OPG and its shareholder states that, "OPG's top operational priority will be to improve the operation of its existing nuclear fleet." The Board concludes that it is reasonable for ratepayers to be the beneficiaries of improved performance being driven internally and by the shareholder.

The Board concludes that a forecast of 50.4 TWh for 2011 and 51.5 TWh for 2012 should be used for determining the revenue requirement. This incorporates an MUE adjustment of 0.5 TWh per year. The Board finds that this provides adequate recognition of past historic variances due to MUE and the possibility of future similar events, but also incorporates the impact of overall performance improvements, recognizes the expectations of the nuclear business and sets an incentive structure that provides benefits to ratepayers while still providing upside potential for OPG.

Finally, the Board accepts OPG's evidence that the Darlington FLR forecast is not an average of past performance, and finds that, even if an average were an appropriate method, it would not be appropriate to remove the results of 2006 given the similarly high year-to-date FLR for 2010. No adjustment will be made to the Darlington FLR. This issue is also discussed in the next section.

4.2 Nuclear Benchmarking

In the previous proceeding, the Board directed OPG to produce further benchmarking studies in its next application. In response to the Board's direction, OPG retained ScottMadden Inc. to undertake a nuclear benchmarking initiative in conjunction with the development of the 2010-2014 nuclear business plan.

ScottMadden prepared two reports. The Phase 1 report summarized the results of benchmarking OPG's nuclear operational and financial performance against external peers using 19 industry performance metrics. The Phase 2 report established performance improvement targets with the intent of driving OPG's nuclear business closer to top quartile performance. The following table summarizes plant level performance against the 19 industry performance metrics.

Table 10: Plant Level Performance Summary

Metric	Best Quartile*	Median*	Pickering A	Pickering B	Darlington
Safety					
All Injury Rate			0.73 ⇧	0.96 ⇧	1.04 ⇧
2-Year Industrial Safety Accident Rate	0.05	0.09	0.14 ⇩	0.07 ⇧	0.04 ⇧
2-Year Collective Radiation Exposure (man-rem per unit)	62.15	81.84	44.2 ⇧	95.81 ⇧	72.83 ⇧
Airborne Tritium (TBq) Emissions per Unit	48.0	101.0	101.0 ⇧	50.7 ⇧	40.0 ⇩
Fuel Reliability (microcuries per gram)	0.000001	0.000165	0.00059 ⇧	0.00159 ⇩	0.00025 ⇧
2-Year Reactor Trip Rate (# per 7,000 hrs)	0.00	0.33	1.22 ⇩	0.26 ⇔	0.00 ⇔
3-Year Auxiliary Feedwater System Unavailability	0.0014	0.0020	0.0119 ⇧	0.0040 ⇧	0.0017 ⇧
3-Year Emergency AC Power Unavailability	0.0024	0.0076	0.0081 ⇩	0.0091 ⇧	0.0020 ⇔
3-Year High Pressure Safety Injection Unavailability	0.0001	0.0037	0.0012 ⇧	0.0001 ⇧	0.0001 ⇧
Reliability					
WANO NPI (Index)	96.19	62.46	60.84 ⇧	60.93 ⇔	95.67 ⇔
2-Year Forced Loss Rate (%)	0.68	3.79	37.90 ⇩	18.19 ⇩	0.93 ⇧
2-Year Unit Capability Factor (%)	90.97	84.31	56.6 ⇩	73.17 ⇔	91.99 ⇔
2-Year Chemistry Performance Indicator (Index)	1.00	1.01	1.13 ⇧	1.25 ⇩	1.00 ⇔
1-Year Online Elective Maintenance (work orders/unit)	218	278	425 ⇧	695 ⇧	311 ⇧
1-Year Online Corrective Maintenance (work orders/unit)	4	7	14 ⇧	28 ⇧	11 ⇧
Value for Money					
3-Year Total Generating Costs per MWh ($/Net MWh)	28.66	32.31	92.27 ⇧	58.68 ⇔	30.08 ⇔
3-Year Non-Fuel Operating Costs per MWh ($/Net MWh)	18.06	21.28	82.62 ⇧	50.95 ⇔	25.10 ⇔
3-Year Fuel Costs per MWh ($/Net MWh)	5.02	5.37	2.64 ⇔	2.68 ⇔	2.62 ⇔
3-Year Capital Costs per MW DER	32.79	46.22	32.07 ⇩	32.44 ⇧	18.79 ⇔

*Panel used for WANO quartile and median data was All COG CANDU

⇧ = overall upward trend during reporting period

⇩ = overall declining trend during reporting period

⇔ = consistent performance during the reporting period

Green = best quartile performance/max NPI points achieved if applicable
White = 2nd quartile performance
Yellow = 3rd quartile performance
Red = lowest quartile performance

Source: Exh. F5-1-1, Table 2

The ScottMadden Phase 1 report identified three key metrics (of the 19 benchmarked) and OPG's rank with respect to the comparators:

- World Association of Nuclear Operators Nuclear Performance Index: OPG ranks 17th out of 20
- Unit Capability Factor: OPG ranks 18th out of 20
- Total Generating Cost per MWh: OPG ranks 16th out of 16

The evidence and the testimony of OPG witnesses and Mr. John Sequeira of ScottMadden Inc., addressed the implementation of a gap-based business planning process to drive improvements. OPG has developed initiatives to close performance gaps between it and its industry peers. OPG has implemented a top-down approach to set operational and financial performance targets and generation targets. Under the top-down approach, performance gaps are identified relative to comparators; targets are set by management and communicated down to the business units which are requested to define ways to close the gap. In contrast, under the bottom-up approach, business units develop their business plans which are rolled up to the company level. OPG stated that the top-down business planning is a new commitment that establishes limits on cost and sets expectations for production that directly impact the nuclear payment amounts.

OPG submitted that the benchmarking methodology employed by ScottMadden is reasonable and should be accepted by the Board. In addition, OPG is of the view that the benchmarking results and the targets chosen are appropriate and by adopting the recommendations of ScottMadden in the Phase 2 Report, including top-down gap-based business planning, OPG has responded fully to the Benchmarking Reports and the Board's direction in EB-2007-0905.

OPG further submitted that the combination of the site and support unit initiatives, along with the fleet-wide initiatives, ensured that the 2010 - 2014 business plan operational and financial targets established during the ScottMadden Phase 2 target setting were maintained and/or exceeded.

Board staff, AMPCO, CME, PWU, SEC and VECC filed submissions on the benchmarking initiative and addressed the following areas in some detail:

- Comparators;
- Forced Loss Rate;

- Continuous Improvement
- Radiation Protection Pilot; and
- Staff Level Benchmarking.

Comparators

OPG identified that in selecting all North American nuclear plants as peers, including those using pressurized water reactor ("PWR") and boiling water reactor ("BWR") technology, the benchmarking peer group was expanded beyond that used in the benchmarking study that was filed in EB-2007-0905. OPG also believes that there are a number of key drivers such as unit size, single unit versus multi-unit stations, age of reactors and technology differences that assist in explaining relative performance. In regard to technology differences, OPG stated that CANDU technology may result in specific cost disadvantages related to the engineering, operating and maintenance costs as compared to PWR and BWR. Whether the disadvantages exceeded the advantages was a matter of dispute.

PWU submitted that the comparator group chosen by ScottMadden is not comparable to OPG due to the unique technological differences of CANDU and therefore it is inappropriate to employ top-down planning based on a flawed external benchmarking exercise. PWU further argued that benchmarking must focus on cost factors that are within the control of management and, in regard to the ScottMadden report, a deliberate decision was made to not attempt to isolate these costs.

Board staff argued that there is no evidence in this case that the disadvantages of CANDU technology exceed the advantages and therefore the CANDU technology should not be a significant consideration in assessing OPG performance against U.S. reactors. SEC stated that it was logically inconsistent for OPG to argue that its CANDU facilities are inherently more costly to operate while also stating that it is not possible to identify and quantify these costs. SEC submitted that OPG should improve benchmarking by undertaking a study of the major cost differences between CANDU and PWR/BWR facilities.

OPG responded that Board staff understated the difference between CANDU and PWR/BWR reactors. While there are advantages to CANDU including lower fuel cost and online fuelling, there are also disadvantages such as extended outage times and higher costs to address maintenance and inspections associated with fuel handling.

Board staff submitted that it would be useful to supplement the benchmarking by assessing targets for each plant against historical performance to assist the Board with its decision making. SEC submitted that the next phase of benchmarking should remove outliers and include analysis of unit size, age and refurbishment status. CME supported SEC's submission. OPG maintained that it has to balance a number of factors and cost is only one of them.

Forced Loss Rate

The Phase 1 report identified that Darlington's two year FLR average was 0.93%. OPG's target for Darlington FLR is 1.5%. SEC and Board staff submitted that OPG's target, which is based on historical data, should be adjusted to exclude the outlier of 3.2% in 2006. Board staff submitted that the FLR target should be 1.1% while SEC submitted that the FLR should be 1.0%. Board staff further submitted that an FLR exceeding 1.1% does not represent "continuous improvement" and that the Board may wish to consider removing $14 million from the revenue requirement.

In reply, OPG stated that the targets were not based on historical averages, but based on recent performance and plant material condition. OPG also stated neither Board staff nor SEC offered any reason why the actual results for 2006 should be ignored. While 2006 is higher than other recent years, 2008 was considerably lower, and the purpose of averaging is to smooth the impacts of both high and low years. OPG further submitted that Board staff and SEC did not take into account the most recent 2010 forecast of 3.5% (based on eight months of actual data) and, in light of this result, 3.2% cannot be considered an outlier. OPG stated that 1.5% does represent a substantial improvement. The Board decision on FLR is also addressed in the production forecast section in this Decision at section 4.1.

Continuous Improvement

Whether the targets represented continuous improvement was an issue because the Memorandum of Agreement that OPG has with its shareholder, and which is found at Appendix G, states:

> OPG will seek continuous improvement in its nuclear generation business and internal services. OPG will benchmark its performance in these areas against nuclear plants worldwide as well as against the top quartile of private and publicly-owned nuclear electricity generators in North America. OPG's top operational priority will be to improve the operation of its existing nuclear fleet.

The Board staff submission questioned whether the Darlington FLR and Total Generating Cost targets represented continuous improvement as referred to in the ScottMadden Phase 2 report and OPG's Memorandum of Agreement, particularly given OPG's ranking in the industry of 16th out of 16 for Total Generating Cost.

OPG replied that Board staff's focus was too narrow. OPG stated that Board staff focused on value for money metrics while there are nineteen benchmarking measures.

Radiation Protection Pilot

In order to demonstrate how detailed top-down staffing analysis can be used to identify and drive staffing reduction, ScottMadden piloted an analysis using OPG's Radiation Protection Function. This involved: (a) identifying initial top-down benchmark targets based upon Electric Utility Cost Group ("EUCG") data and Bruce Power staff levels, (b) defining current OPG activities by position, (c) identifying the FTEs associated with each activity, (d) benchmarking these activities against peer companies, and (e) developing estimates of potential OPG future staff levels. Based on the analysis, ScottMadden recommended a potential reduction of 48 FTEs, comprised of 35 being reassigned and 13 eliminated altogether. OPG responded by reassigning 35 staff and eliminating one FTE.

Board staff submitted that ratepayers should not bear the cost of OPG's choice to retain employee positions that the expert consultant identified were not necessary. CME supported this position. OPG replied that the $2.2 million per year reduction advocated by Board staff fails to recognize that one of the 13 positions was eliminated. OPG also stated that the recommendation was held in abeyance pending further study of Pickering A and B consolidation as well as incremental work associated with the alpha contamination industry issue which arose in the last 6 to 8 months.

Staff Level Benchmarking

Board staff quoted from the Phase 2 report at page 26 in the staff submission,

> The results of both the EUCG and the Bruce Power functional comparison showed that overall OPGN staff levels per unit exceed both the industry median and Bruce Power levels… For the most part, however, OPGN staff levels are generally higher than the comparison panels.

Staff also referred to the Navigant report filed in the previous proceeding which found OPG's 2006 staffing levels to be 12% higher than benchmark. Staff submitted that an updated benchmarking report should be filed with the next application and that the Board should direct OPG to file a similar staffing analysis undertaken by ScottMadden

(Appendix G of the Phase 2 Report). OPG stated it considers Total Generating Cost to be the key metric and that staffing and remuneration are factors that drive cost. OPG argued that it was the company's responsibility to decide what evidence to produce to support its application, and in its view Board staff had not shown why filing the staffing analysis should be directed by the Board.

Board Findings

The Board accepts the benchmarking methodology and finds that the ScottMadden reports were conducted objectively and based on considerable expertise and experience in these types of studies. The evidence demonstrates that benchmarking can be conducted for an entity such as OPG. While there are differences between OPG's circumstances and those of its comparators, the entities can be compared and appropriate conclusions can be drawn. OPG's own shareholder expects such comparisons (as identified in the Memorandum of Agreement), and the Board identified the importance of this type of analysis in the prior payment amounts decision. Benchmarking analysis can assist the Board in assessing the reasonableness of OPG's expenditure proposals.

While suggestions were put forward for improvements in the benchmarking parameters and comparators, there was no clear consensus on whether these changes would improve the quality of the methodology or the study. The Board directs OPG to continue undertaking the benchmarking work and to produce a report to be filed with the next cost of service application. By keeping the methodology and report format consistent, the Board will be able to identify the progress OPG has made in improving its performance relative to the peer group.

The Board will not direct that OPG conduct a study on the differences between CANDU and PWR/BWR technologies, but as OPG itself acknowledges, it is the company's responsibility to decide what evidence to produce to support its application. OPG may wish to consider whether a study of the major cost differences between CANDU and PWR/BWR would facilitate the review of its application on the issue of cost differences between the various technologies.

The actual results of the benchmarking study show that OPG's performance falls far short of what ratepayers should reasonably expect. On all three key metrics in the Phase 1 report OPG ranked last or very close to last. The Board acknowledges OPG's enthusiasm in adopting the top-down approach to budgeting and the commitment to continual improvement in performance. However, the evidence to date has shown

limited results. The Radiation Protection Pilot, the cost consequences of which have been captured in Section 6.1, Compensation, is a case in point. An opportunity for increased efficiency was identified but was not fully implemented. This may be a function of timing in terms of how long it takes to implement changes but is nonetheless evidence that only limited progress has been achieved despite OPG's stated commitment to continual improvement. The Board will direct OPG to conduct an examination of staffing levels as part of its next benchmarking study. As OPG works towards improving its overall cost performance the Board wishes to monitor developments in the area of staffing, as well as compensation and operational performance.

With respect to the targets, the Board has already decided (in the context of the production forecast) not to adjust the Forced Loss Rate forecast. Although the Board accepts the forecast target, there is considerable room for improvement as demonstrated by OPG's historical FLR in the Phase 1 report, and the Board expects to review in the next application the initiatives OPG has taken and intends to take to improve the FLR.

The Board will make no adjustments to the OM&A forecasts directly as a result of this benchmarking work. However, the Board's findings with respect to compensation are based in part on the benchmarking evidence. This is discussed more fully in Chapter 6.

4.3 Nuclear OM&A

The test period OM&A forecast is summarized in the following table.

Table 12: OM&A Summary – Nuclear

$ million	2007 Actual	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Base OM&A	$1,204.9	$1,252.4	$1,216.5	$1,187.0	$1,192.3	$1,219.8
Project OM&A	111.6	136.5	143.7	143.8	135.9	132.2
Outage OM&A	215.6	196.1	254.8	284.6	214.8	201.1
Generation Development OM&A	11.8	34.1	79.5	40.5	5.9	4.5
Allocation of Corporate Costs	240.7	237.6	234.5	247.0	249.2	252.3
Allocation of Centrally Held Costs	210.2	132.2	58.8	171.0	199.0	234.3
Asset Service Fee	33.2	28.8	27.2	24.6	24.1	23.7
Total OM&A	$2,027.9	$2,017.7	$2,015.0	$2,098.6	$2,021.2	$2,067.9
Fuel	$113.0	$149.9	$172.6	$201.9	$235.6	$261.7

Source: Exh. F2-1-1 Table 1

Base OM&A is the main cost component for operations and maintenance of the nuclear facilities. Base OM&A also includes labour costs for planned outages and the cost of all forced outages. OPG stated that base OM&A has been reduced significantly noting a decline of $32 million between 2008 actual and 2012 forecast. OPG also stated it has made significant operational and cost improvements which have been demonstrated since the previous application, with cumulative work-driven cost savings of $260 million for the 2010 - 2012 period. In addition, 2012 regular staff levels are forecast to be below 2008 levels by 689, while non-regular staff FTEs will be reduced by 559. OPG noted that these reductions are due to the seven key initiatives that form part of the 2010 - 2014 nuclear business plan and other cost control measures.

Project OM&A includes the costs related to portfolio projects and non-portfolio projects such as Pickering B Continued Operations. OPG stated that there have been significant reductions in portfolio OM&A due to an increased focus on cost control and reprioritization of project work.

Outage OM&A levels depend on the number of specific outages in a given year. The test period outage OM&A is significantly lower than the levels spent in 2009 and 2010, when vacuum building outages were undertaken at Darlington and Pickering.

Board staff and intervenors focused on three issues: Base OM&A, Pickering B Continued Operations and nuclear fuel. These are addressed below.

4.3.1 Base, Project and Outage OM&A

Board staff questioned OPG's assertion that 2012 base OM&A costs are forecast to be below 2008 with cumulative work driven cost savings of $260 million for the 2010-2012 period. Staff noted that OPG only identified adjustments that were in its favour in arriving at the $260 million figure, as only cost increases were included to normalize the results. Board staff also observed that there was OM&A underspending (compared with approved levels) in 2008 and 2009 of $67 million.

Board staff also submitted that it was unable to confirm OPG's FTE reductions evidence, suggesting to Board staff that the reductions were overstated. One of the contributors to this difficulty in confirming FTE reductions is OPG's practice of using headcount for historical periods and FTE for the future test period. Board staff also questioned the appropriateness of using 2008 as a comparator year given the costs and staff vacancies that were deferred from 2007 to 2008 which contributed to a base OM&A increase of $47.5 million from 2007 to 2008.

CME agreed with Board staff that OPG does not appear to have achieved work-driven savings of $260 million and noted that the Board should be particularly concerned by the historical trend of OPG's Base OM&A decreasing in 2009 and 2010, followed by material increases in the test years.

OPG replied that its evidence clearly shows a downward trend from 2008 to 2012 on a normalized basis. OPG maintained that when the 2010-2012 data are properly adjusted, there is a $260 million savings when compared with 2008. OPG replied that it chose 2008 as a comparator year because it was the first year of regulation, and 2008 was not chosen to make the test period forecast appear more favourable.

In reply, OPG presented data from three sources and concluded that the FTE reductions from 2008 to 2012 are 643 and not 443 as stated in the staff submission. OPG noted that the restated FTE reduction of 643 is not much lower than the 689 provided in the application.

SEC submitted that the Darlington OM&A budget should be reduced to meet a non-fuel operating cost of $25.10/MWh, stating there is room to manage staffing. SEC submitted that this would reduce the revenue requirement by $40 million. OPG replied that the interrogatory responses that SEC was relying on were not all presented on the same basis and that other post employment benefits were not included consistently.

SEC submitted that base OM&A should also be reduced by $10 million, or 1% of labour costs, to reflect the difference between the standardized labour rates used for calculating the budget and the actual labour costs. OPG responded that the submission is not consistent with the evidence. OPG referred to testimony to the effect that there will always be a variance with respect to the standard labour costing process.

SEC also submitted that OPG should develop a plan to achieve a non-fuel cost target of $40.00/MWh for Pickering A and B, but did not suggest a specific OM&A reduction for Pickering. AMPCO submitted that the 10% base OM&A disallowance for Pickering A from the previous case did not impair OPG's ability to operate Pickering A safely and that the costs related to the operation of Pickering A continue to be excessive. AMPCO therefore submitted there should be a further 10% reduction in base OM&A for the test period for Pickering A. OPG replied that AMPCO's submission has no basis in the evidence and is arbitrary. OPG further argued that it has implemented a more

aggressive business planning process, including aggressive targets for Pickering A operation and maintenance costs.

Board Findings

Despite the disagreements amongst the parties as to the extent of OPG's claimed savings to date, the Board concludes that OPG has made progress in controlling costs and the growth of costs, but the benchmarking evidence and compensation evidence demonstrate that further progress is warranted. Rather than selecting specific cost per MWh targets for each of the stations, the Board has focused its attention on compensation costs. Compensation costs are one of the key drivers of OM&A expenditures and hence overall cost performance. That issue is addressed in Chapter 6. The Pickering B Continued Operations project is addressed separately below.

The Board will make no additional adjustments to the forecast Base, Project or Outage OM&A levels, with one exception. In its Impact Statement filed on September 30, 2010, OPG identified a $13 million increase over the test period for Canadian Nuclear Safety Commission ("CNSC") fees. OPG did not request recognition of this increase because it is largely offset by a freeze on management salaries. However, the Board is adjusting the provision for compensation costs in Chapter 6 and is including the impact of the management wage freeze in that adjustment. The Board will therefore allow the increased cost associated with CNSC costs as well.

4.3.2 Pickering B Continued Operations

OPG has proposed a continued operations program to extend the life of the four units at Pickering B from 2014-2016 to 2018-2020. OPG noted the program must be undertaken in the test period or the units will start to close and the potential benefits will be lost. There is also the consideration that OPG does not plan to operate the two units at Pickering A with Pickering B shut down due to significant technical and economic challenges. Therefore extending the service life at Pickering B until 2020 will allow the two Pickering A units to operate until at least 2020.

OPG stated that the project is covered by O. Reg. 53/05 section 6(2)4 as the program will increase output, and OPG has requested variance account treatment. The program includes maintenance to improve plant condition, inspections, some feeder replacement and the fuel channel life cycle management project.

In the project business case, OPG estimated that the project will cost $190.2 million, all of which is OM&A. The test period costs are $92.9 million. However, OPG acknowledged that it had double counted the cost of the fuel channel life management project ($8.8 million), and therefore the forecast is actually $84.1 million. The business case analysis indicated that the project has a net present value of $1.1 billion ($2010). OPG has assigned a medium level of confidence to achieving the expected four years of additional life. Accordingly, OPG's Depreciation Review Committee has not proceeded with approval to extend life for depreciation purposes. PWU and the Society supported OPG's position.

CCC submitted that it would be premature for the Board to approve the project at this time and suggested that the need and economics should be considered within the context of the Ontario Power Authority's ("OPA") long term supply plan which will come before the Board for approval. Energy Probe submitted that it had low confidence in the success and good performance of the project and stated its preference to have the project funded by a private shareholder. In reply, OPG repeated that the work must be undertaken in the test period as otherwise the units will start to close in 2014.

Board staff questioned the costing of the Pickering B Continued Operations project. Outside of the admitted double counting for the fuel channel life management project, staff questioned the range of cost estimates in the public domain of $190.2 million in the application and $300 million in other OPG documents as well as the lack of contingency in the $190.2 million figure. OPG dismissed Board staff's concerns in Reply Argument, stating that, "For some reason Board staff is unable to distinguish between numbers that appear in press releases and sustainability reports and the testimony of the senior OPG executive that is actually accountable for the project." [23] OPG asserted that the cost of $190.2 million is OPG's best estimate.

Board staff also questioned the estimated benefits associated with the project and recommended that OPG provide an independent analysis of the project to support future cost recovery. For example, staff submitted the use of a price of approximately $50/MWh is inappropriate in assessing Pickering relative to replacement generation and that the appropriate figure to use is Total Generating Cost. Staff also questioned the assumed unit capability factors since they were much higher than the actual unit capability factors at the Pickering stations. SEC agreed with Board staff that the

[23] Reply Argument, p. 201.

benefits of the project appear to be over stated. SEC submitted that OPG should curtail further spending until an independent analysis of the benefits is carried out.

OPG argued that no parties provided competing analyses of the benefits. In OPG's view, references to the assumptions used in its analysis were selective and it is clear that the OPA supports the test period expenditures. OPG further submitted that using Total Generating Cost for the benefits analysis should be rejected since it includes costs that will exist notwithstanding the shutdown of Pickering. With respect to unit capability factors, OPG noted that it had performed a sensitivity analysis with varying levels of unit capability factors and the net present value is significantly positive even for the lower end of the range.

Board staff argued that, given the confidence expressed by OPG's witnesses that the project will come in on budget and that no contingency is required, there should be no need to use the capacity refurbishment variance account. If the Board has discretion, staff recommended that the Board restrict the use of the account to those costs that are not routine OM&A activities (i.e., the fuel channel life cycle management project). Staff also noted its concerns that OPG stated it is counting on the variance account to the extent a contingency is required. AMPCO supported the approach proposed by Board staff. OPG maintained that the entire project is clearly within the scope of the account. OPG noted that even work for which there is high confidence can have a variance. Further, if the project comes in under budget, excluding it from the variance account would mean that ratepayers would be denied a credit.

Board Findings

The Board approves $84.1 million in costs for Pickering B Continued Operations in this test period.

In this proceeding, the Board is of the view that its role is limited to determining the following:

- whether the planned spending on the Pickering B Continued Operations in 2011 and 2012 is reasonable based on the business case; and
- whether OPG's decision not to extend the end of life for Pickering B for accounting purposes is reasonable. This issue is addressed in Chapter 8.

The Board will consider spending for years beyond the current test period in OPG's next application, at which time there will be examination of the progress to date and an assessment of project economics and the company's confidence level on the basis of that experience and more current information.

With respect to the planned spending during the test period, the Board has determined that the proposed O&M budget is reasonable, except for the double counting of the fuel channel life cycle management project which will be corrected. The Board is satisfied that the business case substantiates the reasonableness of test period expenditures. However, the Board does have concerns with respect to the analysis. Parties have raised a number of other issues regarding the specifics of the benefits analysis, including the unit capability factors, the price used for comparative purposes and the absence of a contingency component in the cost estimate. The Board expects OPG to address these issues more fully in its next application when the Board considers the next segment of spending, as well as any variance in the account. In seeking to provide the best evidence, OPG should consider seeking an independent assessment by the OPA to be filed with its next application.

With respect to the operation of the variance account, the Board agrees with OPG that section 6(2)4 of O. Reg. 53/05 applies to Pickering B Continued Operations as the project is designed to increase output of a generating facility to which O. Reg. 53/05 applies.

Although this project is to be funded entirely through operating expenditures, it has many similarities with a capital project because O. Reg. 53/05 requires the tracking of any variances through the operation of the capacity refurbishment variance account. In the normal course, for projects funded through operating expenditures, the company would bear the risk of budget variances and would therefore need to manage the costs within its overall revenue envelope. For this project, however, any variances will be captured in the variance account for later prudence determination by the Board. The Board is concerned that ratepayers bear a particular risk in relation to these large nuclear projects, which have a history of going over budget. In examining the prudence of any incremental expenditure (over the approved level for the test period) the Board will consider whether OPG might prudently have offset the cost increases through cost reductions or cost deferrals elsewhere in its operations.

4.3.3 Nuclear Fuel

The nuclear fuel cost forecast is $235.6 million for 2011 and $261.7 million for 2012. OPG's current contract mix is 25% indexed contracts (base price plus escalation at time of delivery) and 75% market related contracts (based on market price at time of delivery). OPG's supply contracts are summarized in the following table.

Table 13: Summary of Existing Fuel Contracts (as of Dec 31, 2009)

Contract	Contract Negotiation	Date of First Delivery	Delivery Period	Total Quantity (000 kgU)	Pricing: MR = Market Related COMB = Combination of MR & Indexed
A	2006 1st half	2007	7 Years	1,462	MR
B	2006 1st half	2010	6 Years	1,154	COMB
C	2006 1st half	2011	5 Years	385	COMB
D	2007 2nd half	2009	9 Years	1,154	COMB

Source: Exh. F2-5-1, Chart 3

OPG asserted that its procurement process balances security of supply with quality and price. Submissions were filed on procurement practices and the nuclear fuel variance account.

Board staff submitted that OPG's fuel procurement strategy needs to be better balanced, with greater emphasis on minimizing cost. Staff pointed to the 30% decline in the market price in uranium in the last two years and noted that OPG's costs have increased 35% in the same period. Staff questioned the prudence of contracting for three to four years of supply within about one year, when OPG stated that only two years of supply is required. Staff also argued that it appears the lack of emphasis on regularly entering the market and minimizing fuel costs contributes to the "disconnect" between uranium prices and OPG's fuel costs discussed in the application. CCC and CME, SEC and VECC made similar or supporting submissions. CCC and VECC also proposed that there be a third party assessment of OPG's procurement strategy.

OPG responded that the benchmarking results demonstrated that OPG's fuel costs per MWh are lower than any other nuclear operator in the comparator group and that the absolute increase in fuel cost is due to a higher forecast production. OPG further noted that although uranium prices have declined from their peak, they remain substantially above levels seen prior to 2005.

OPG noted that the procurement strategy was reviewed by an external party in 2007 and the report was filed as an undertaking response. OPG maintained that the strategy

was approved by the Board in the last proceeding and the only difference now is that parties are using hindsight to suggest that other strategies are appropriate. OPG did express its willingness to undertake another external review of nuclear fuel procurement as long as the funding is maintained in the regulatory affairs budget.

Board staff argued that the current structure of the nuclear fuel variance account does not provide appropriate incentives to minimize nuclear fuel costs and instead provides an incentive for OPG to over-forecast fuel costs. Board staff also noted that when this variance account was established, staff's understanding was that it was to ensure that both consumers and OPG would be held harmless to the extent actual fuel costs differed from the OPG forecast. Nuclear fuel inventory is reflected in rate base as part of working capital. Board staff submitted that OPG would over earn if the Board approves a larger amount for nuclear fuel in working capital than OPG actually uses in the test period. Staff noted that OPG's nuclear fuel inventory was overstated by $27 million during the previous test period and that therefore OPG benefitted financially.

Board staff submitted that the nuclear fuel variance account should be restructured to capture changes in nuclear fuel inventory and to establish a sharing mechanism that is favourable to ratepayers. CCC, CME and SEC supported these recommendations. VECC submitted that the asymmetrical sharing mechanism proposed by Board staff required further analysis. As an alternative to restructuring the existing variance account, VECC proposed that the Board approve a sub-account or separate account for the variance related to fuel inventory in working capital. AMPCO submitted that the account balances should be recalculated since the beginning of the Board's oversight of OPG.

OPG replied that parties provided no evidence to support their claims that the nuclear fuel variance account is a disincentive to cost control. OPG argued that the main driver of the variance was actual production being lower than forecast. OPG maintained that the increase in fuel cost in the test period is related to increases in the price of uranium, processing and higher nuclear production.

OPG argued that Board staff's proposal for a sharing mechanism presents a significant business risk to OPG and is contrary to the creation of just and reasonable rates. OPG also argued that using the existing variance account or creating a new one to address the perceived over-recovery due to nuclear fuel inventory in rate base is too complex to do accurately.

Board Findings

The Board accepts the forecast of fuel costs for 2011 and 2012, and will increase the forecast by $9 million in recognition of the increased production forecast the Board has set.[24]

The Board has determined that a variance account for nuclear fuel costs is not an appropriate way to incent OPG to look for the most efficient portfolio of contracts for nuclear fuel procurement. Nuclear fuel is one of the inputs which OPG must manage, and other than the fact that the Board approved a variance account in the last proceeding, there is no particular reason why this type of cost should be treated as a pass through. The Board has determined that it is more appropriate for the company to bear the risk that the forecast is inaccurate, than for ratepayers to do so.

In the next proceeding, the Board will examine OPG's procurement program to determine whether the company is optimizing its contracting in order to minimize costs to ratepayers. The Board will therefore direct OPG to file an external review as part of its next application.

4.4 Nuclear Capital Expenditures and Rate Base

OPG's forecasted capital expenditures for the nuclear facilities, including the Darlington Refurbishment Project ("DRP"), are $296.9 million in 2011 and $447.4 million in 2012. A break-out, including historical planned amounts and actual expenditures, is set out in the following table.

Table 14: Nuclear Capital Expenditures

($ million)	2007 Actual	2008 Approved	2008 Actual	2009 Approved	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Project Portfolio	$186.4	$172.0	$163.5	$172.0	$159.4	$171.9	$172.0	$172.1
P2/3 Isolation	9.3	17.0	5.7	10.0	14.1	8.8	0.0	0.0
Minor Fixed Assets	11.5	17.8	14.2	16.8	17.0	20.2	19.7	19.5
Pickering B Refurbishment	0.0	0.0	0.0	148.8	0.0	0.0	0.0	0.0
Total Operations	**207.2**	**206.8**	**183.4**	**347.6**	**190.5**	**200.9**	**191.7**	**191.6**
Generation Development*	**0.0**	**0.0**	**0.0**	**0.0**	**1.0**	**72.9**	**105.2**	**255.8**
TOTAL NUCLEAR	**$207.2**	**$206.8**	**$183.4**	**$347.6**	**$191.5**	**$273.8**	**$296.9**	**$447.4**
Note: * Darlington Refurbishment Project								

Source: Exh. D2-1-1, Tables 1 and 2, Exh. D2-1-1, Tables 4a-c

[24] Exh. L-5-25

OPG stated that total project portfolio, including both capital (shown in the table above) and OM&A expenditures, in the test period is $280.3 million in 2011 and $283.2 million in 2012, and that these amounts are consistent with OPG's target annual reinvestment levels of $25 million to $30 million per nuclear unit. The generation development capital reflects the expenditures related to the definition phase of the DRP and the Darlington Campus Master Plan.

In response to the Board's direction in the prior decision, OPG provided a more detailed explanation of the treatment of the Pickering 2/3 Isolation project costs. There were no submissions from parties on this matter.

OPG is seeking approval of a rate base for its nuclear facilities of $4,041.3 million for 2011 and $4,150.8 million for 2012. The proposed amounts reflect $175.5 million and $186.6 million of in-service additions in 2011 and 2012, respectively. OPG's historical and proposed rate base is set out in the following table.

Table 15: Nuclear Rate Base

($ million)	2007 Actual	2008 Approved	2008 Actual	2009 Approved	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Gross Plant at Cost	$4,321.1	$4,525.5	$4,499.0	$4,733.2	$4,679.5	$5,355.3	$5,672.7	$6,047.7
Accumulated Depreciation	1,446.1	1,737.8	1,733.1	2,037.1	2,023.7	2,278.8	2,500.5	2,745.4
Total Net Plant	**2,875.0**	**2,787.7**	**2,765.9**	**2,696.1**	**2,655.8**	**3,076.5**	**3,172.2**	**3,302.3**
Working Capital	16.0	16.0	15.9	16.0	14.3	9.2	4.0	4.0
Fuel	208.7	281.1	266.9	330.1	316.9	357.4	379.8	360.8
Materials & Supplies	400.4	424.4	415.5	441.7	434.4	468.9	485.3	483.7
Total WC/Fuel/M&S	**625.1**	**721.5**	**698.3**	**787.8**	**765.6**	**835.5**	**869.1**	**848.5**
TOTAL NUCLEAR RATE BASE	**$3,500.1**	**$3,509.2**	**$3,464.2**	**$3,483.9**	**$3,421.4**	**$3,912.0**	**$4,041.3**	**$4,150.8**

Source: Exh. B3-3-1 Tables 1 and 2, Exh. B3-4-1 Tables 1 and 2, Exh. L-1-2

OPG's proposed rate base for 2011 and 2012 also includes $125.5 million and $306.0 million respectively for Construction Work in Progress ("CWIP") related to the DRP. The issue of CWIP is addressed in Chapter 5.

The test period revenue requirement does not include any capital or non-capital costs related to new nuclear development. According to OPG, any costs it incurs related to the planning and preparation for new nuclear will be recovered from a new funding mechanism determined by the Province. If no such funding mechanism has been

created, then OPG will seek to recover any costs incurred through the Nuclear Development Variance account pursuant to the provisions of O. Reg. 53/05.

No parties objected to any of the proposed capital expenditures except the DRP. This project is discussed in Chapter 5. Parties did raise objections with respect to the level of test year rate base.

Board staff argued that nuclear rate base should be reduced by a total of $128 million in 2011 and $161 million in 2012 for the following four adjustments:

- $100 million should be removed in each of 2011 and 2012 because OPG has not made any changes to prevent a recurrence of the over forecasting of rate base in 2008 and 2009. The historical overstatement of forecast rate base resulted in overearnings of $5.4 million in 2008 and $7.3 million in 2009, not including effects on taxes and depreciation;
- $6 million should be removed in 2011 and $12 million in 2012 to reflect 2010 actual rate base additions being under budget by approximately 10% or $12 million;
- $22 million should be removed in 2011 and $44 million in 2012 because the evidence is that the weld overlay project at Darlington will not proceed until after the test period; and
- $5 million for the partial deferral of the Maintenance Facility at Darlington.

CME, SEC and VECC agreed with Board Staff.

OPG's position was that the $100 million historical overstatement is based on a portion of rate base that ignores un-amortized asset retirement costs ("ARC"), which comprises more than one third of the proposed nuclear rate base. OPG argued that the positive variance in unamortized ARC would offset most of this. OPG also suggested that it had under-recovered depreciation expense in the prior years which would also serve to offset some of the rate base overstatement.

OPG submitted that the Board should apply the same reasoning as found in the Board's Hydro One 2009-2010 transmission rates decision. In that decision, the Board reasoned on the matter of revenue over-collection due to capital underspending that:

> On the other hand, there will be some level of revenue over-collection if the shortfall pertains to projects with in-service dates in the test period. However, the Board accepts that any potential over-collection is short-term in nature because rate base will be corrected in Hydro One's next application. The Board will rely on its usual manner of testing and setting rate base at the next cost of service proceeding and will not order that expenditures be tracked in a variance account.[25]

With respect to projects deferred beyond the test period, OPG's position was that these projects would be replaced with other high priority projects. Board staff questioned the prioritization process and whether this approach was appropriate in times of rising rates. OPG argued that it has a robust process for evaluating proposed capital spending and that Board staff's project-by-project focus is inconsistent with the Board's longstanding approach to reviewing levels of capital spending rather than specific projects. OPG maintained that the level of project spending has been benchmarked and is consistent with other nuclear operators. OPG also pointed out that its project spending has been constant in the period 2007 to 2012 despite increases in material and labour costs. OPG referred to the Board's decision in EB-2005-0001 which stated that it was not the Board's role to micro-manage Enbridge Gas Distribution Inc.'s capital spending plans. OPG also suggested that it is not uncommon for external factors to impact on a utility's ability to undertake a specific project. In these situations, OPG suggested that utilities will advance work from a future year.

AMPCO argued that rate base should be reduced as a result of two projects, the Darlington Change Room project, which was over budget, and the Pickering Cafeteria which was over budget and considerably late. AMPCO argued that the Board should disallow the cost overruns and that additions to rate base should be reduced.

OPG responded that AMPCO had failed to establish that OPG had acted imprudently. OPG also argued that the Post Implementation Report for the Pickering Cafeteria Project, which was relied upon by AMPCO, should not be used as the basis for a finding of imprudence because it is a retrospective review conducted with the benefit of hindsight and not information that could have been known at the time of project execution. With respect to the Darlington Change Room project, OPG pointed out that the final costs were compared with partial release amounts and that only 40% of the engineering had been completed at that stage. OPG argued that a range of +60% to -

[25] Decision with Reasons, EB-2008-0272, May 28, 2009, p. 37.

40% around a project's estimated cost is reasonable, citing the Project Management Institute in support of this proposition.

Board Findings

The Board finds that the proposed capital budget for projects entering service in the test period is reasonable. With the exception of the DRP, the Board is making no finding on the appropriateness of the capital budget for projects entering rate base after the test year. DRP is addressed in Chapter 5.

The Board will not adjust rate base going forward in response to past overstatement of rate base. Looking at total rate base, there is no established trend of over-forecasting. There may be a history of overestimating the level of new plant entering service, but no clear pattern can be discerned at this time which would warrant an adjustment going forward.

The Board notes that while financial accounting requires that ARC be included in gross plant and accumulated depreciation, it would be beneficial and would improve transparency for regulatory purposes if gross plant and accumulated depreciation for ARC were separately identified in the rate base evidence. The Board expects this approach to be taken in the next application.

Several parties argued that there should be an adjustment to capture the impact of the deferral of the weld overlay project and the maintenance facility. As a general proposition, the Board agrees that it should not be reviewing every item in OPG's portfolio, but should be focusing on the larger items, the overall level of capital spending, and whether the budget is reasonable for projects entering rate base in the test period. The Board accepts OPG's evidence that when one project is deferred, there are other projects that can be brought forward. The Board agrees that this is a reasonable approach as much of the work is undertaken by full time staff and contractors which are specifically authorized to work in the nuclear facilities. The Board accepts that OPG cannot easily ramp up or down the overall pace of work on these projects. Although some overall slippage beyond the test period may result, the Board has determined that an adjustment for the deferral of these projects is not warranted given the small amounts involved. In the next proceeding, the Board will re-examine the issue of rate base additions and the accuracy of OPG's forecasts in this area. The separate presentation of data related to ARC will assist in this regard.

The Board understands AMPCO's concerns about the overspending on the Pickering cafeteria and on the Darlington change room. However, these projects are very small compared to the overall nuclear division, and the Board is not persuaded that rate base should be reduced as a result of the cost overruns. The Board accepts OPG's evidence that there were unique attributes to these projects being built at a nuclear plant.

The Board is, however, concerned about OPG's argument that a range of +60% to -40% around a capital project's estimated cost is reasonable. This may be acceptable for relatively small projects which do not warrant a large investment in upfront detailed costing or where the variations on a portfolio basis are smaller. However, the Board does not consider the range acceptable for larger projects because it suggests a lack of adequate cost control. The Board notes that OPG is confident that the DRP (the largest current project) will have a range of $6 billion to $10 billion, a range of +25% to -25% around the midpoint of $8 billion. The Board expects OPG to do just as well on any other projects of substance. In addition to the need for rigorous cost control, the Board is also concerned that projects be assessed on an accurate analysis of the costs and benefits. A project which is reasonable on the basis of a particular cost estimate might well be unreasonable if the costs were 60% higher.

4.5 Other Revenues

OPG receives revenue from non-energy businesses and that revenue is applied as an offset to the nuclear revenue requirement. These businesses are heavy water services, isotope sales and inspection and maintenance services. The nuclear facilities also provide ancillary services as described in the Other Revenue – Hydroelectric section. The variance between forecast and actual ancillary services revenue are recorded in the Ancillary Service Net Revenue Variance Account – Nuclear.

The table below sets out the actual and forecast levels for other revenue.

Table 16: Other Revenues – Nuclear ($ million)

Revenue Source	2007 Actual	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
NGD- Related Revenues:						
Heavy Water Sales & Processing	$30.3	$28.5	$25.5	$23.1	$17.3	$15.6
Isotope Sales (Cobalt 60 + Tritium)	7.0	10.2	7.2	9.3	9.6	11.0
Inspection & Maintenance Services	90.6	63.1	43.7	44.5	19.7	0.0
Total NGD-Related Revenues	127.9	101.7	76.4	77.0	46.6	26.6
NGD-Related Direct Costs	63.8	45.1	35.7	31.9	17.5	5.6
NGD-Related Contribution Margin	64.1	56.6	40.7	45.0	29.0	20.9
Ancillary Services	2.8	3.4	2.4	2.9	2.9	3.0
Other	1.7	0.3	0.8	0.1	0.1	0.1
Total	**$68.6**	**$60.3**	**$43.9**	**$48.0**	**$32.0**	**$24.0**

Source: Exh. G2-1-1, Table 1

The decrease in other revenues in the test period is largely the result of the reduced revenue from Inspection & Maintenance Services. The primary external customer for these services is Bruce Power. OPG and Bruce Power have agreed to terminate the service agreement effective June 2011. Parties focused their submissions on heavy water sales.

OPG proposed that effective March 1, 2011, all revenues and costs associated with the sale of surplus heavy water be excluded as an offset to the payment amounts. SEC, supported by VECC, submitted that net revenues from any sales of surplus heavy water should offset test period revenue requirement. While the surplus heavy water is fully depreciated and therefore not in rate base, SEC stated that it is still an asset on the books of the nuclear operations. In SEC's view, ratepayers paid for this heavy water – albeit prior to the Board's regulation of OPG - and are entitled to the benefits of any sales.

OPG replied that the surplus status of the surplus heavy water is an important factor to be considered. The heavy water is not required to support operations and the costs of storing and maintaining the assets are excluded from the revenue requirement. While acknowledging ratepayers had paid for the surplus heavy water, OPG referred to the

2006 ATCO decision of the Supreme Court of Canada, which stated "The payment does not incorporate acquiring ownership or control of the utility's assets."[26]

Board Findings

With the exception of revenues from heavy water sales, discussed below, the Board accepts OPG's forecast of other revenues from nuclear operations.

With respect to heavy water sales, the Board is guided by three decisions in addition to the Supreme Court's decision in ATCO, namely the decision in EB-2005-0211 (the "Cushion Gas decision")[27] and EB-2005-0211/EB-2006-0081 ("the Review Decision)[28] and the Divisional Court decision in *Toronto Hydro-Electric Systems Ltd. v. Ontario Energy Board*.[29]

First, the Board notes that the ATCO decision was not made in the context of rate-setting, a fact acknowledged by the Court itself, and in that respect is not strictly analogous to the current case. The Board's decision in EB-2005-0211, the "Cushion Gas Decision" is also relevant, but more analogous to the current case. In that case Union Gas was selling an asset that was surplus to utility requirements and would not need to be replaced. The Board determined that it did have the jurisdiction to order a splitting of proceeds. The Board further determined that a splitting of proceeds did not constitute "confiscation" (a term used in the ATCO decision) but rather was an exercise in ratemaking which could be designed to incentivize utility behaviour and protect ratepayers. The Board subsequently decided to review this decision on its own motion and ultimately confirmed the decision that the Board has jurisdiction to allocate proceeds to ratepayers for ratemaking purposes.

The Divisional Court's decision in *Toronto Hydro-Electric Systems Ltd. v. Ontario Energy Board* found that the Board's ratemaking powers gave it the authority to allocate the proceeds to ratepayers from the sale of certain properties (albeit ones that were being replaced by different properties), and noted that the Board had done so in order to mitigate the impact on ratepayers.

Revenue from the sale of heavy water is in many ways akin to any other revenue offset; in fact, that is how OPG proposed to treat it in the last proceeding and the Board

[26] *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)*, 2006 SCC 4, para. 68.
[27] Decision with Reasons, June 28, 2006.
[28] Decision and Order, January 30, 2007.
[29] [2009] O.J. No. 1872.

approved it. When the heavy water was purchased and/or produced, it went into OPG's rate base. Over the years, ratepayers at least notionally paid all of the costs associated with these assets both through depreciation expenses and through the cost of capital on the amounts in rate base. In other words, rates were based on the total recovery of the capital costs, often explained as both a return of capital and a return on capital. As the assets were fully depreciated by the time OPG applied for its first payments order, the Board did not set or approve the payment amounts related to these assets. However, they would have formed part of the payments that OPG recovered from ratepayers prior to OPG's regulation by the Board.

OPG observes in its reply argument that any heavy water that is sold will be surplus, and not required to support the regulated operations. Although this is true, that does not differentiate it from other types of revenue offsets, for example, isotope sales. Isotopes produced by OPG and sold to a third party are not used to support regulated operations. Almost by definition, anything sold (whether a good or a service) and used as a revenue offset is surplus to utility operations. And yet it is the long standing practice of this Board, both for OPG and for the many gas and electricity distribution and transmission companies it regulates, to use its ratemaking (or payment making) powers to apply these revenues as an offset to the utility's revenue requirement. In some cases these offsets can have a material impact on rates. The rationale is not based on any ownership claim; rather it is based on the regulatory principle that only reasonable costs are eligible for recovery and that a reasonable level of cost is the level of cost associated with the efficient operation of the system. Therefore, if costs can be reduced by selling products or services to third parties, then ratepayers should only be required to pay the efficient level of costs, which reflects the revenue offsets from the efficient use of the assets. It may also be appropriate to provide utilities with incentives to run operations as efficiently as possible. For this reason, the revenue offsets are sometimes shared between the company and the ratepayer as a means of encouraging the company to maximize those revenue offsets – for its benefit and also the benefit of the ratepayer.

Disputes surrounding the Board's jurisdiction to use these revenues as offsets tend to focus on revenues from sales of capital assets: for example heavy water, cushion gas, or real property. From a ratemaking perspective, however, there is little to distinguish the ratepayer contribution toward capital assets from the ratepayer contribution to services sold by a utility. Although the accounting treatment is different (the costs of capital assets are recovered through rates/payments over a number of years through

depreciation and a return on rate base, whereas O&M costs are expensed and recovered through rates/payments in the year they occur), the underlying costs for both the provision of services to third parties and surplus assets are borne by ratepayers. For example, OPG is only able to make isotope sales because ratepayers pay the costs associated with OPG's capacity to provide these services. In that light, no party argued that using these revenues as a revenue offset is inappropriate. However, OPG is able to provide these services because it has "surplus" resources.

The Board is therefore not convinced that there is a fundamental difference between revenues a utility earns through the sale of capital assets and those it earns through the sale of services. By using the revenue from heavy water sales as revenue offsets for the purpose of setting rates or payments, the Board is no more confiscating the capital assets of a utility than it is confiscating the labour of utility's employees when it uses revenues from isotope sales as revenue offsets. Indeed, as noted in the cushion gas decision, the suggestion that such offsets amount to confiscation or some type of ratepayer ownership of utility assets is miscast. The Board's power to set payment amounts (or rates) is a broad one. The Board must have regard to all of a utility's costs, but must also consider the utility's revenues.

The Board concludes that the same approach is appropriate with respect to heavy water sales. Namely, is there a good reason to split proceeds from heavy water sales? The Board concludes there is, both to protect ratepayers and to provide an appropriate incentive to OPG. The proceeds of the sale are an appropriate offset to the costs that have otherwise been borne by ratepayers. This offset is appropriate as it recognizes the efficient utilization of the assets and hence the efficient level of costs which are reasonably borne by ratepayers. It is also appropriate to share the proceeds with OPG in order to provide the company with an incentive to maximize the revenues. The Board orders the forecast proceeds for 2011 and 2012, as identified by OPG, to be split 50/50 between ratepayers and customers. As these amounts were provided in confidence, the Board will not disclose them in this decision. However, OPG will be required to incorporate these amounts in its preparation of the draft payments order. No variance account will be established. OPG will bear the risk associated with the level of sales being different than forecast.

5 DARLINGTON REFURBISHMENT

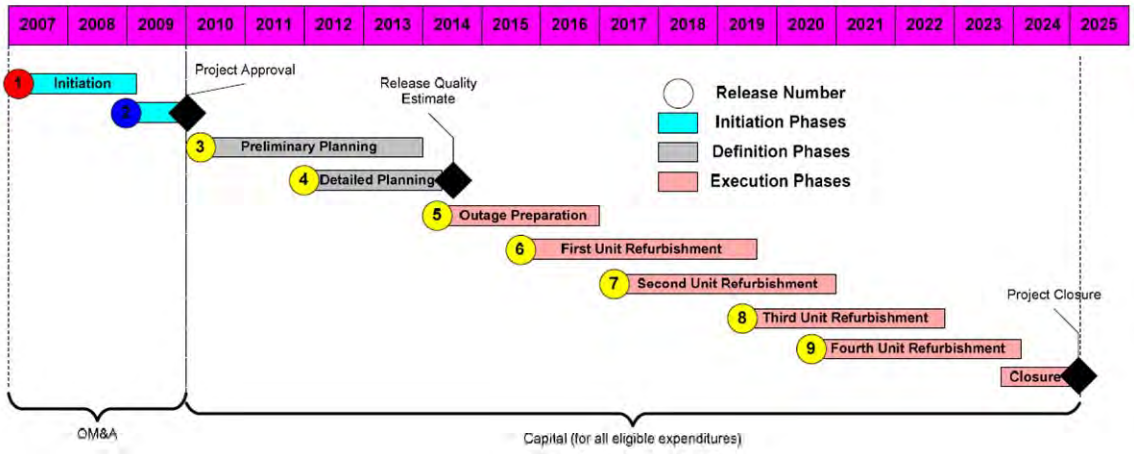
5.1 Darlington Refurbishment Project

OPG intends to refurbish the four units at Darlington and preliminary planning is underway. The refurbishment is expected to extend the operating life of the units by approximately 30 years, to about 2051.

OPG's position is that the Darlington Refurbishment Project ("DRP") is covered by section 6(2)4 of O. Reg. 53/05 because it will both refurbish the Darlington station and increase its output by allowing it to operate for a longer period.

OPG's Board of Directors approved the decision to proceed with the DRP on November 19, 2009. The Board of Directors also approved the release of funds for the definition phase of the project to complete preliminary planning and the overall timing and release strategy. Figure 1 shows the planned timeline for phases of the DRP. During the test period, preliminary planning will continue, and detailed planning is expected to begin. In 2014, following completion of the planning phases, there will be further approval by OPG's Board of Directors of the "release quality estimates" and the execution phases of the project will begin.

Figure 1: Overview of the Darlington Refurbishment Release Strategy



Source: Exh. D2-2-1, p. 10

OPG provided an Economic Feasibility Assessment of DRP as part of the application. That assessment concluded with high confidence that the DRP will have a levelized unit energy cost ("LUEC") of 6 to 8 cents per kWh ($2009). The projected cost of the DRP is in the range of $6 to $10 billion ($2009). OPG filed a letter from the OPA concurring that, at a LUEC of 6 to 8 cents per kWh, the DRP is an economic alternative to combined cycle gas turbines. OPG also filed a letter from the Minister of Energy and Infrastructure dated February 4, 2010. The Minister indicated that the government is satisfied that the analysis performed by OPG resulted in optimal decisions regarding Darlington Refurbishment and that the government concurs with the decision taken by OPG's Board of Directors on November 19, 2009. OPG indicated that it will bring forward an update on DRP and the planned expenditures and work plans for 2013-2014 in its next application.

In the current application, OPG seeks approval for the following:

- Test period OM&A costs of $5.9 million and $4.5 million in 2011 and 2012, respectively;
- Changes in rate base, return on rate base, depreciation expense, tax expense and Bruce lease net revenues that result from extending the service life of Darlington to 2051 and the change in nuclear liabilities associated with Darlington Refurbishment;
- Disposition of the difference between forecast 2010 non-capital costs associated with DRP and the costs underlying the current payment amounts, which are a credit of approximately $23 million No objections were raised in respect of this issue and the account is addressed in Chapter 10; and
- An increase in rate base to reflect inclusion of Construction Work in Progress ("CWIP") for the DRP.

OPG's evidence was that the net effect of these requests is a reduction in the test period revenue requirement of $197.1 million. As noted in Table 14, the forecast capital expenditures for this project are $105.2 million in 2011 and $255.8 million in 2012.

Some parties questioned the extent to which OPG's Board of Directors has actually approved the DRP, and the scope of those approvals.

PWU argued that OPG is entitled to recover the cost of the DRP as prescribed by O. Reg. 53/05 section 6(2)4 if the Board finds the past expenditures were prudently

incurred and future expenditures were prudently made. It is PWU's position that the test period costs are reasonable and prudent. The Society also submitted that the DRP budget should be approved as submitted. Board staff agreed that test period costs are appropriate and should be approved so that OPG can plan its work on the DRP.

Other parties indicated varying levels of support for OPG's requested approvals.

CME supported the DRP plan and urged the Board to find that OPG's evidence is sufficient to support a tentative conclusion that the DRP is likely to be economically feasible. However, CME called on the Board to make it clear in its decision that if OPG fails to objectively establish and confirm that the DRP continues to have positive economic feasibility in future proceedings the Board may require OPG to write down the value of Darlington assets for regulatory purposes.

SEC argued that the Board should approve the test period spending but suggested that OPG should aggressively limit its ongoing financial commitment in the event the project does not proceed. SEC suggested that the Board should clearly state that regardless of any approvals for spending in the test period, OPG remains at risk for the prudence of the project and the spending related to it. To address this concern, SEC urged the Board to include the following in its decision:

- OPG should be cautioned to use every effort to minimize the commitments it is making for spending beyond the test period, and to take all steps to ensure that the cost of any termination decision will be as low as possible;
- In the next payment amounts application, OPG should provide a full package of information supporting the project, equivalent to that which would be required for a leave to construct application, and should assume that no further spending will be authorized until the Board has reviewed that application. Alternatively OPG should obtain a binding legal approval for the project from another source, such as the government, if it wants further spending approvals from the Board; and
- If OPG decides not to return to the Board for 2013 rates, the company should be fully at risk for any spending and commitments in 2013 and beyond, and that barring extraordinary circumstances, no such spending will be recovered from ratepayers.[30]

[30] SEC Argument, para. 4.5.29.

AMPCO supported the exploration of a refurbishment option for Darlington but urged the Board to be clear that approval to proceed with further project definition does not constitute any kind of approval of the prudence of the project. AMPCO also questioned the reliability of OPG's cost estimates in the absence of evidence about its contracting strategies. AMPCO submitted that OPG should be required to inform the Board of its contracting and procurement plans. AMPCO cited ongoing problems with refurbishments at Point Lepreau and Bruce Power in support of its position that the Board should carefully monitor the progress and outlook of the DRP.

OPG suggested that SEC's and AMPCO's submissions amounted to micro-managing, which would put the DRP schedule at risk, could drive up project costs, and is not an appropriate role for the Board.

VECC submitted that the Board should explicitly reject any notion that its decision provides any level of approval for OPG's expenditures with respect to the DRP, as OPG has specifically said in its Argument in Chief that it is not seeking Board approval of the project. VECC also submitted that a DRP variance account be established to allow the Board to track OM&A expenses for future prudence review.

Board staff questioned the certainty of the DRP cost estimates, referring to cost over runs of previous projects. Board staff also questioned the comprehensiveness of the LUEC analysis and the depth of the OPA support as the OPA relied on OPG's economic input assumptions. CCC stated that the OPA's analysis was below the threshold of exhaustive and argued that the Board should place no weight on the OPA's support.

GEC argued that in the absence of any case supporting the economics of the project in comparison to other alternatives, the Board should not offer any assurance of cost recovery to OPG at this stage by accepting the capital budget as reasonable. GEC argued that there is no analysis to support OPG's assertion that the DRP is in the public interest. GEC submitted that, "Without a *prima facie* case that the project is likely to be in the public interest there can be no finding that the capital budget is reasonable."[31]

OPG indicated that it is not seeking approval of costs beyond the test period and so, in its view, the Board does not need to address the issue of the sufficiency of evidence for post-2012 costs. OPG submitted that what the Board should confirm in its decision is

[31] GEC Argument, p. 39.

that its approval of the test period revenue requirement impacts and accounting changes constitutes its agreement that OPG's proposed test period activities are reasonable based on the evidence. OPG further submitted that any subsequent review should only relate to the prudence of OPG's execution of test period activities and not to the prudence of having undertaken these activities.

With respect to public interest, OPG submitted that the Province has already determined that DRP is in the public interest, and referred to the Minister's letter endorsing the decision to proceed with the DRP, and the inclusion of the DRP in the Long Term Energy Plan.

Results of Service Life Extension to 2051

OPG proposed changes in rate base, return on rate base and tax expense resulting from the service life extension of Darlington. The major impacts of the service life extension are higher asset retirement obligation ("ARO") and asset retirement cost ("ARC"). However, due to the project end of service life of 2051, there is an overall net reduction to the revenue requirement in the test period. These accounting changes were made effective January 1, 2010.

Board staff questioned whether the definition phase of the DRP met the requirements of CICA Handbook section 3064 criteria for capitalization for projects under development since CICA Handbook section 3061 provided limited accounting guidance in this area. OPG replied that the correct reference is section 3061 and that it has properly followed the CICA guidance.

Several parties questioned whether the accounting changes were premature. Board staff noted that if the Board decided not to approve the revenue requirement impacts associated with service life extension of the DRP, this decision would introduce a separate and second set of books that would differ significantly from OPG's GAAP reporting. GEC submitted that if DRP does not proceed, the reductions in contributions to decommissioning costs will have to be made up by future ratepayers, possibly resulting in a disproportionate rate burden. GEC asserted that the revenue requirement impact of the proposed accounting changes should be not be implemented because there is no firm decision on the Darlington life extension plan.

SEC argued that the reduction in revenue requirement should not be implemented as it would be problematic in the event that DRP is later determined not to be the best

generation option. As OPG has already implemented the accounting changes, SEC proposed a DRP Accounting Variance Account. Payments would be collected from ratepayers, but the equivalent of the proposed reduction in revenue requirement would accumulate in the account. If the DRP proceeds, ratepayers would be credited with the savings. OPG questioned whether SEC's proposed account could even be recognized for financial statement purposes as it would be a contingent asset, only realized if DRP did not proceed.

VECC noted that the impact of the DRP, with the CWIP in rate base removed, amounted to a credit to customers of $235.2 million of which $188.8 million is nuclear liability related. On the basis of the protection afforded OPG under the Ontario Nuclear Funds Agreement ("ONFA"), the nuclear liability deferral account and the ability to unwind the impact of depreciation rate changes, VECC submitted that the Board could approve OPG's DRP requests (with the exception of CWIP). VECC argued that if DRP does not proceed, the updated reference plan under ONFA and the operation of the nuclear liability deferral account will true up the impacts.

As noted above, OPG implemented the accounting impacts of the Darlington service life extension effective January 1, 2010. SEC and VECC argued that these changes were inappropriate. The parties argued that the changes had the effect of reducing the revenue requirement in 2010 by $64.2 million, and that this amount should be credited to ratepayers. SEC further added that the Board should declare OPG's 2010 rates interim, lest an argument of retroactivity impede implementation of the credit. OPG replied that the accounting changes with respect to ARO, ARC and Darlington life extension which took place on January 1, 2010 have been audited by external auditors. OPG characterized SEC's proposal as retroactive ratemaking.

OPG also argued that a complete reversal of these accounting adjustments would raise an issue of consistency with the Board's decision in EB-2007-0905 as it pertains to the Bruce facilities.

Board Findings

The Board agrees with OPG that section 6(2)4 of O. Reg. 53/05 applies to the DRP as it is designed to refurbish a generating facility to which O. Reg. 53/05 applies. All cost variances (both capital and operating expenses) will be captured in the account for later disposition. Therefore, the Board's mandate is to ensure that OPG recovers the costs of the DRP if the Board is satisfied that these costs were prudently incurred. However,

in the Board's view this does not preclude the Board from assessing the reasonableness of the proposed expenditures before they are made. The Board agrees with OPG that the prudence review of those aspects of the work which are found to be reasonable in this proceeding will be limited to the differential between the proposed expenditures and the actual cost.

In this proceeding, the Board is of the view that its role is to determine the following:

- whether the planned capital and OM&A spending on the DRP in 2011 and 2012 is reasonable;
- whether OPG's decision to reflect the planned extension of the end of life for Darlington for accounting purposes is reasonable; and
- whether CWIP should be allowed in rate base.

Approval of the expenditures for the test period should not be taken as an acceptance of the business case underlying the entire project. Once the DRP reaches the stage of having a release quality cost estimate the Board expects to examine the reasonableness of proceeding with the project. At that time, the Board may consider establishing a framework within which prudence could be examined should the project proceed forward. Other approval mechanisms, including some form of pre-approval of future expenses, may also be considered. The Board's findings in this proceeding are not determinative of the outcome of that review.

The Board expects OPG to file updated information on its progress for examination in the next proceeding.

The Board accepts OPG's evidence that its Board of Directors has given approval to proceed with the DRP. Of course, as it is a phased project, the question of whether to continue with the project or terminate it will be addressed at each Board of Director approval stage. It remains open to OPG to recommend to its Board that the project not be continued, and it remains open to the Board of Directors to halt the project.

OPG urged the Board to find that the Minister's letter concurring with the DRP means that the DRP is, by definition, in the public interest. The Board declines to make such a finding, but is also of the view that it does not need to make a finding that the project as a whole is in the public interest in order to grant the approvals sought by OPG in this application. The Board disagrees with GEC's position that public interest must be

determined before a determination on the capital budget. For purposes of this Decision, the Board's focus is on the reasonableness of the test period expenditures, including a determination as to whether they are supported by the business case. The Board also observes that nuclear refurbishment is included in the Supply Mix Directive, which is not subject to the Board's approval.

A number of parties expressed concerns about the quality of the business case for the DRP. The Board shares their concerns about the likely overall costs of the project and the ability of OPG to keep the project in the $6 billion to $10 billion range currently forecast. Quite apart from whether OPG has improved its performance, the Board has concerns because no CANDU plant has yet been refurbished on budget. Despite these limitations, the Board finds that for the purposes of approving the spending in the test period, the business case is a reasonable underpinning, and the Board approves the OM&A spending as forecast. OPG did not seek specific approval of the capital expenditures, but it did request the inclusion of CWIP in rate base and that request is addressed below. The Board does not normally give approval to capital expenditures for projects which come into service after the test period except in the case of a leave to construct application. With respect to all other capital budgets in this case, the Board has limited itself to addressing the amounts for items entering into service in the test period. However, the Board finds the forecast DRP capital expenditures for the test period to be reasonable.

If the results of the definition phase demonstrate that the costs will rise significantly, the Board expects that OPG's Board will reassess the project at that time. The Board notes the high level of confidence expressed by OPG's witnesses in the costs presented despite OPG's history of cost over-runs and the current experience with the cost overruns of refurbishments at Point Lepreau and Bruce. If there are cost overruns with the DRP, the Board does not expect OPG to suggest that they could not have been foreseen at this stage. This factor may well be considered in any prudence review.

As the DRP is a multi-year project the Board expects that in future payments cases the business case will be updated as OPG seeks further approvals for the project. The Board will therefore not require any additional reporting as requested by SEC, nor will there be any caveats placed in advance on what might happen if OPG does not file an application for 2013. As indicated in the findings related to the Pickering B Continued Operations Project, the Board is concerned that ratepayers bear a particular risk in relation to these large nuclear projects, which have a history of going over budget. In

examining the project going forward, the Board will be interested in examining whether any performance incentives might be appropriate within the parameters of O. Reg. 53/05 and the variance account.

The second major issue is whether the changes in rate base, return on rate base, depreciation expense, tax expense and Bruce lease net revenues that result from service life extension to 2051 are appropriate, from a regulatory perspective.

The Board accepts OPG's evidence that the restatement of the service life extension is in accordance with the decision of the company's Board of Directors to approve the DRP, with GAAP, and as far as it affects net revenue from the Bruce lease arrangements, in accordance with the Board's decision in the previous proceeding.

The only concern with extending the service life for regulatory purposes is what the future impacts would be if a later decision was made to not proceed with the DRP, and the end of life dates were changed to an earlier date. Some parties were concerned that there might have to be large rate increases to recoup the funds not collected during the test period. The Board agrees with VECC that the impact of any future restatement can be reasonably managed, given the protection afforded the company through the ONFA, the nuclear liability deferral account and the possibility of the unwinding of the impact of depreciation rate changes. If DRP does not proceed, the inclusion of DRP in the updated reference plan under ONFA, which is expected in 2011 for the next five-year period of 2012-2016, would result in financial impacts being captured in the nuclear liability deferral account.

The Board notes that by not filing a 2010 payments case, OPG benefited from the changes in the accounting treatment of the DRP in 2010, but ratepayers did not. OPG could have sought an adjustment to the Reference Plan as a result of the changes, and that would have ensured that the revenue requirement impacts would be captured in the variance account; it is unfortunate that OPG chose not to do so. However, the Board is not prepared to accede to SEC and VECC's request to, in effect, reverse the 2010 accounting changes relating to the DRP, or to credit ratepayers with the difference that resulted. The 2010 rate year is not the subject of this application. The Board is not prepared to reopen one element of the previous decision without reviewing the entirety of the 2010 rate year.

5.2 Construction Work In Progress

OPG's application included a proposal to include Construction Work in Progress ("CWIP") for the DRP in rate base. This would result in an addition to rate base of $125.5 million in 2011 and $306.0 million in 2012. These additions to rate base would receive the approved weighted average cost of capital which would result in a revenue requirement of $11.1 million in 2011 and $26.8 million in 2012 for a total of $37.9 million for the test period. OPG also proposed that any recovery of depreciation on this capital would be deferred until the assets come into service. OPG maintained that there would be benefits to ratepayers from this proposal through rate smoothing and lower credit costs.

Two expert witnesses filed reports on this issue – Mr. Ralph Luciani of Charles River Associates on behalf of OPG and Mr. Paul Chernick on behalf of GEC. Both appeared as witnesses at the hearing.

Mr. Luciani's report was largely a presentation of examples in the US where CWIP has been allowed for the development of nuclear facilities and a discussion of their potential as precedents in OPG's situation. Mr. Luciani's report did not describe or discuss the various circumstances in which states had decided not to allow CWIP.

Mr. Chernick's report suggested that the cases in which CWIP has been allowed in the US were not applicable to OPG because the circumstances are quite different. He also reviewed the circumstances in several US jurisdictions which had decided not to allow CWIP, and suggested that they were more akin to the situation in Ontario.

OPG's position was that inclusion of CWIP in rate base is warranted in this case because it meets the criteria for qualifying investments specified by the Board in its EB-2009-0152 report, *The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*, dated July 15, 2010 (the "Report"*)*.

OPG argued that the Board should take the criteria set out in the Report into account in evaluating the CWIP proposal and offered the following evidence in support of each:

> **The need for the project**: The Government of Ontario has endorsed the need for the project by concurring with OPG's decision to proceed with the project and by including it in the government's energy plans.

The public interest benefits of the project: The Minister's support and approval of the project is indicative that it is in the public interest. OPG noted that the Government of Ontario has indicated its support for the DRP, and that this support should be sufficient for the Board to conclude that the DRP is needed and in the public interest. OPG also pointed out that there is no provision in the Act or related regulations for the Board to grant approval for the project. While not currently obligated to undertake the DRP, OPG believes that Ontario's energy needs will require OPG to proceed with the project.

The overall cost of the project in absolute terms: The project will cost between $6 billion and $10 billion and is the largest project being undertaken by a regulated utility in Ontario.

The risks or particular challenges associated with the completion of the project: The project's risks and challenges are broadly similar to those faced by *Green Energy and Green Economy Act* ("Green Energy Act") projects, including the potential for delays, public controversy and the recovery of costs.

The cost of the project in proportion to the current rate base of the utility: The project's cost range of $6 billion to $10 billion is greater than OPG's $4 billion nuclear rate base for 2012. The upper bound of the range is greater than OPG's combined nuclear and hydroelectric rate base of $7.8 billion.

The reasons given for not relying on conventional cost recovery mechanisms: The reasons are rate shock, impact on credit metrics and the subsidy resulting from the difference between Interest During Construction ("IDC") rate and the Allowance for Funds Used during Construction ("AFUDC") rate. Rather than large increases of $350 million to $550 million in the revenue requirement when the DRP is added to rate base in 2020 and in subsequent years, the revenue requirement would increase more gradually starting in 2011. OPG's scenario would have rates increasing by 1 to 1.8% per year each year starting in 2011, rather than a few years with 5 to 10% increases starting in 2020.

Whether the utility is otherwise obligated to undertake the project: While OPG was directed by its shareholder to study the refurbishment of the Darlington units, it has not received a directive to complete the project. Pursuant to the

Report, a utility will not have to establish that "but for" CWIP treatment, the project will not proceed.

OPG argued that the inclusion of CWIP in rate base for the DRP meets the criteria for qualifying investments specified by the Board in the Report.

OPG's case for CWIP was supported the PWU and the Society. The PWU submitted that this proceeding is not the forum to re-hear arguments about the appropriateness of alternative regulatory mechanisms but whether the alternative mechanisms contemplated by the Report should be applied in the case of the DRP. PWU criticized Mr. Chernick's evidence as a re-argument of matters decided in the Report rather than a consideration of the merits of the case presented by OPG.

Other parties, including Board staff, submitted that the Board should deny OPG's request.

First, parties disagreed with OPG's claim that the DRP falls within the scope of the Report as a qualifying investment, and that the CWIP proposal should be evaluated on this basis. These parties argued that the DRP is not a Green Energy Act related investment. They noted that the Report deals with rate-regulated activities of distributors and transmitters and that despite OPG's request during the Board's consultation on the Report, the scope of the Report was not expanded to include generation investments.

In reply argument, OPG submitted that the Report provides for the consideration, on a case-by-case basis, of applications to include CWIP in rate base in advance of a project being declared in-service. OPG sees its proposal as consistent with the Chair of the Board's statement of July 3, 2009 regarding the removal of barriers to infrastructure investment in Ontario.

Intervenors also argued that when evaluated on the basis of the factors suggested by OPG, the DRP did not warrant alternative regulatory mechanism (i.e. CWIP) treatment, arguing that:

- OPG had failed to demonstrate that significant rate shock would be avoided;
- It would be imprudent to recover costs when overall projected costs are not yet defined;

- It would be premature to grant recovery when the project lacks full authorization to proceed, as OPG's Board of Directors has only given permission to proceed with the definition phase of the project;
- The public interest would not be served since the proposed treatment is more costly to ratepayers on a Net Present Value basis;
- Proposals which front-end load costs are disadvantageous to rate-payers since ratepayers' financing costs are higher than OPG's;
- Intergenerational inequity results when ratepayers are asked to pay for costs and there is no corresponding benefit for them;
- OPG's existing credit risk has been unaffected by the DRP expenditures underway; and
- No evidence has been provided that any downward evaluations are forthcoming.

OPG argued that the Board should not consider any of the arguments regarding intergenerational inequity, the "used and useful" principle and differences in ratepayer and OPG financing costs as these have already been dealt with in the Report.

CCC and other intervenors commented that, based on OPG's own analysis, the rate shock would not be that significant, and in the meantime ratepayers will be paying for 10 years for an asset that is not yet in use.

CCC argued that OPG's concern with its credit metrics was hypothetical and unsupported by any evidence of the impact of not having CWIP. In response, OPG quoted Fitch Ratings, that "For regulated U.S. utilities, the availability of a cash return on construction work in progress (CWIP) would reduce the construction risk" and referenced Standard and Poor's observation that OPG had weak cash flow metrics. OPG stated that it is not surprising that it would not be able to quantify the impact of the DRP on its credit metrics until the Board's decision is issued, project financing finalized and rating agencies have had the opportunity to complete the assessment. OPG also pointed out that the incremental risk associated with the DRP is not reflected in OPG's current credit rating and cost of capital.

CME also observed that the timing of the request for CWIP treatment is inopportune, given the increases in electricity bills being experienced by customers, but suggested that OPG may wish to re-apply for this treatment once electricity rates have stabilized.

Board staff submitted that in the event the Board accepts the inclusion of CWIP in rate base, the return should be limited to interest costs similar to the treatment afforded Hydro One in the EB-2006-0501 decision. OPG argued that its circumstances are different from those faced by Hydro One, and so interest rate treatment should not apply. OPG submitted that as a result of this suggestion, OPG's shareholder would be subsidizing the DRP, which OPG estimates to be $200 million to $300 million.

Board Findings

The Board finds that the Report is clear that the policy could apply in other circumstances beyond the Green Energy Act and beyond transmission and distribution infrastructure. However, the Board finds that OPG's request for CWIP is premature, given that the DRP is only at the definition stage.

The Board notes that its policy, as set out in the Report, contemplates the adoption of these mechanisms in the context of an overall approval of a project, generally either through a leave to construct application or through a rates case. The Board notes that this is consistent with the approach taken by US jurisdictions that allow CWIP in rate base, other than those which allow for CWIP through legislation. As the Board is not considering the overall scope of the DRP at this time, it finds that it is premature to adopt any special treatment. The Minister's letter indicating support for the project is not sufficient for this purpose. While it may be persuasive, it does not bind the authorities that will need to approve the project. At the very least, it will require some form of approval under the *Environmental Assessment Act*, and will have to be included in the IPSP.

In filing Mr. Luciani's report in support of its position, OPG sought to persuade the Board that using CWIP to finance nuclear power plants was becoming the accepted approach in US jurisdictions. The Board allowed Mr. Luciani to give evidence despite the reservations expressed by several of the intervenors about his independence given the nature of his retainer which they asserted cast him in the role of advocate. The Board ruled that the evidence would be allowed but that it would take the nature of his retainer into account when considering the weight to be given it.

Of greater concern to the Board is the nature of Mr. Luciani's report itself. While his report did not purport to be a review of all US jurisdictions, it was a completely one-sided account of the issue as it included only those jurisdictions which had decided to allow CWIP and neglected to mention any that did not. In cross-examination, Mr.

Luciani admitted that there were many jurisdictions that had rejected CWIP as a funding mechanism. In the Board's view the contents of his report created a misleading impression about the level of acceptance of CWIP as a mechanism. The Board expects objectivity from independent expert witnesses.

In any event, the Board finds that most of the US jurisdictions that have allowed CWIP for nuclear plants have quite different circumstances than those facing OPG. The companies concerned are generally private sector operators who require incentives to build and the CWIP approvals have been granted in the context of overall project approvals. Neither of these circumstances applies to OPG.

The Board therefore gives little weight to Mr. Luciani's evidence and finds that it cannot be relied on by OPG as the underpinning for its request for CWIP.

The Board will not approve CWIP in rate base at this time. The Board is prepared to consider the proposal again in the future, but the Board will expect better evidence in support of the proposal. For example, prior to approval of CWIP, the Board would expect to see more persuasive evidence than was presented in this application as to the benefits for ratepayers in terms of improved credit metrics and rate smoothing. On the latter point regarding rate smoothing, the Board would expect to see additional evidence to support the proposition that ratepayers are better off if they begin to pay sooner for these large multi-year projects.

6 CORPORATE COSTS

6.1 Compensation

The following table summarizes historic and test period compensation levels.

Table 17: Compensation ($ million)

Organization	2007	2008	2009	2010	2011	2012
Nuclear	$1,187.90	$1,206.13	$1,265.01	$1,243.41	$1,196.23	$1,210.84
Regulated Hydro	42.29	45.14	45.47	47.87	50.36	52.73
Allocated Corporate Support	122.19	125.95	128.85	131.41	135.15	138.59
TOTAL REGULATED COSTS	**$1,352.38**	**$1,377.22**	**$1,439.33**	**$1,422.69**	**$1,381.74**	**$1,402.16**

Note1: Includes total wages, benefits, current service cost component of the Pension/OPEB costs and annual incentives.

Note 2: Does not reflect OPG's impact statement

Source: Issue 6.8, Exh. L-1-74

OPG employs approximately 10,000 staff in the regulated business, 95% of which support or are employed in the nuclear business. Of the staff in the regulated business, 90% are unionized: two thirds represented by the PWU and one third by the Society.

OPG stated that, as a result of collective bargaining, the general wage increase for the PWU and Society has been between 2% and 3% for the past number of years. As noted in the application, the forecast wage increase for each test year is 3% for management and 3% for both unions. OPG has forecast an additional 1% increase to account for step progressions and promotions for staff within the unions. OPG's labour agreement with the Society expired on December 31, 2010 and its agreement with the PWU expires on March 31, 2012.

OPG maintained that its staff must be highly skilled and noted that 73% of the positions require post secondary education. OPG indicated that these employees are in demand across the country. The OPG workforce is mature and OPG estimated that 20% to 25% will need to be replaced between 2010 and 2014.

Towers Perrin conducts a survey which compares compensation data among a variety of employers across Canada where job matches are sufficiently strong. Although OPG participates in the Towers Perrin study, the survey is not prepared specifically for OPG.

OPG used the data from the survey to prepare a chart comparing OPG's salary levels with those of other organizations in the survey. Specifically, the chart shows the variance between OPG's salary levels and the 75th percentile of the comparators for 30 positions. OPG selected the positions that were included in the chart based on its judgment of which ones were the best matches.[32] Together, these positions account for approximately 30% of OPG staff who work in the regulated businesses. The chart showed that OPG was above the 75th percentile for some positions, and below it for others, and was slightly above the 75th percentile on an overall basis.[33] OPG selected the 75th percentile as the most appropriate point of comparison (Towers Perrin provided data for the 10th, 25th, 50th, 75th, and 90th percentiles). Towers Perrin did not participate in the preparation of the chart, and did not provide OPG with advice concerning the best comparable positions, or the use of the 75th percentile as a comparator. Although the Towers Perrin survey included data on both base salaries and total cash compensation, the chart prepared by OPG used the base salary data only.

OPG maintained that the compensation for unionized employees is appropriately benchmarked at the 75th percentile of the market for companies surveyed by Towers Perrin due to the nature and complexity of work performed by OPG staff. OPG advised that the 30 positions in the survey accounted for 2,804 OPG employees. In order to bring this set of positions to the 75th percentile, $16 million would have to be removed from payroll, and in order to bring the positions to the 50th percentile, $37.7 million would have to be removed from payroll.

In response to recommendations of the Agency Review Panel,[34] management compensation has declined by 12.6% in the period 2007-2009. OPG benchmarks management compensation against the 50th percentile of market. In the impact statement filed on September 30, 2010, OPG stated that it is removing management wage escalation for the period to April 1, 2012 in response to the *Public Sector Compensation Restraint Act*. OPG proposed to offset the $12 million reduction related to management wages against the $13 million increase in Canadian Nuclear Safety Commission fees. The latter is discussed at section 4.3.1.

The Society and the PWU supported OPG's application. The Society submitted that if the Board believes that a 3% economic increase is unlikely to be granted by an

[32] Tr. Vol. 8, pp. 166-168.
[33] Exh. F4-3-1, pp. 30-31.
[34] The Agency Review Panel's June 27, 2007 report recommended changes to the way executive compensation would be determined at Ontario's five electricity sector institutions, which included OPG.

arbitrator, then it may consider the use of a variance account to capture any amount less than 3%. In the PWU's view, the Board needs to consider whether the current compensation rates for PWU represented staff was reasonable and prudent when the present collective agreement was entered into in April 2009. Regarding comparisons, the PWU submitted that simply comparing OPG compensation with other non-nuclear employers is not evidence of a lack of prudence on the part of OPG. The PWU also submitted that an assessment of compensation requires an assessment of productivity and skill level.

Board staff questioned OPG's choice to benchmark at the 75th percentile, noting that a number of positions OPG selected from the Towers Perrin survey are generic positions (i.e., labourer, warehouse supervisor). In addition, staff noted that OPG was not able to identify any positions that were exclusively related to specialized skills required of an employee working in a nuclear plant environment, because Towers Perrin did not categorize the positions in this way. Staff submitted that the rationale provided by OPG for use of the 75th percentile was not substantiated, and that the 50th percentile is more consistent with the use of the median by the Board in relation to Hydro One.[35] Staff submitted that it was appropriate to remove $37.7 million from annual revenue requirement based on moving the 30 positions to the 50th percentile. Staff also submitted that it was appropriate to reduce the revenue requirement associated with the Society wage increase from 4% to 2.5%, as this was more consistent with recent arbitration decisions entered into evidence by PWU. These arbitration decisions resulted in increases of 2%, 2.25% and 3%.

CME submitted that the Board can assume that the Towers Perrin report is likely representative of all OPG incumbents, and urged the Board to consider higher disallowances than those suggested by Board staff. CME extrapolated the Towers Perrin results to all employees and estimated reductions of $134.48 million assuming reductions to the 50th percentile. CCC supported CME's position.

SEC submitted it would be unfair to require OPG to move to the 50th percentile immediately and proposed a 25% reduction in 2011 (of the total amount required to match the 50th percentile) and 50% in 2012, amounting to reductions of $33.7 million for 2011 and $67.3 million for 2012. SEC observed that where the Board has set limits previously, regulated entities have responded favourably. SEC further proposed the elimination of the licence retention bonus. With respect to the licence retention bonus,

[35] Decision with Reasons, EB-2008-0272, May 28, 2009, pp. 28-31.

OPG maintained that it is appropriate due to the effort and resources required to retain licences and the comparable practice at Bruce Power.

OPG replied that it is bound by its collective agreements and that there is no basis for selecting the 50th percentile as the appropriate benchmark. OPG argued that skills and training requirements are extensive, even for positions viewed as generic by parties. OPG noted that intervenors relied on no evidence to support their view that the 50th percentile was the appropriate target.

With respect to the Ontario Hydro successor companies, OPG provided a wage comparison of OPG to Hydro One for comparable Society positions. Staff entered into evidence a similar comparison for certain PWU positions from the EB-2010-0002 Hydro One application. Board staff submitted that there is no justification for OPG to consistently pay its staff more than Hydro One for generic positions such as mechanical maintainer, regional field mechanic or labourer.

OPG maintained that its compensation compares favourably with the other successor companies, and that on a weighted average basis, OPG's wages are 10% lower than Bruce Power – the only other large nuclear operator in the province.

OPG noted that one Ontario Hydro successor company has undergone arbitration and received a 3% increase excluding progression and promotion. OPG argued that the Board staff position of 2.5% has no basis and that the reduction should be at most 0.5%.

As noted in the section on benchmarking, there was difficulty reviewing compensation data and trends due to OPG's use of headcount for the historical period and FTEs for the future period. Parties were generally of the view that FTEs should be used for all periods. SEC further submitted that OPG should be required to file compensation information in the format of Appendix 2K used for electricity distributors.[36] OPG responded that it would file the equivalent of Appendix 2K which is based on FTEs, to provide historical and forecast data on a comparable basis.

Board staff and SEC also submitted that OPG should be directed to file an independent full compensation study with its next application similar to the study that the Board

[36] Ontario Energy Board, Filing Requirements for Transmission and Distribution Applications, June 28, 2010.

required of Hydro One.[37] Board staff noted that, given total compensation costs of almost $2.8 billion over the test period, the cost of such a study would be reasonable.

OPG argued that an external study of compensation was not required because the study would be expensive, at a cost of about $0.5 million to $1 million, there are a limited number of nuclear operators in Canada, and OPG is bound by its collective agreements. OPG stated that if it was directed to complete a study, it would do so provided funding was allocated.

Board Findings

Compensation makes up a very significant component of OPG's total operating costs. The Board is concerned with both the number of staff and the level of compensation paid in light of the overall performance of the nuclear business. Each of these issues will be addressed separately.

The lack of comparable data (use of headcount for the historical period and FTEs for the future) make comparison and trending of staffing levels difficult. The Board must be able to see proposed staffing levels and compare those to previous period actuals. The Board therefore will direct OPG to file on a FTE basis in its next application and to restate historical years on that basis.

One of the reasons for the discontinuity between headcount and FTEs may be the extensive use of overtime, particularly in the nuclear division. The Board expects to examine the issue of overtime more closely in the next proceeding. The Board expects OPG to demonstrate that it has optimized the mix of potential staffing resources.

Despite this difficulty in comparing proposed staffing levels with past periods, the Board is of the view that OPG has opportunities to reduce the overall number of employees further as a means of controlling total costs and enhancing productivity. This was demonstrated by OPG's own evidence, as explained by OPG's witness and by Mr. Sequeira from ScottMadden, with respect to the Radiation Protection Function.[38]

The ScottMadden Phase 2 report observed that OPG's staffing levels per unit exceed both the industry median and Bruce Power, and that OPG staff levels are generally higher than the comparison panels (while noting that this may be influenced by OPG's

[37] Decision with Reasons, EB-2006-0501, August 16, 2007, p. 33.
[38] Tr. Vol. 3, p. 24.

practice of contracting out relatively few project based outage functions).[39] For this reason, the Board has also directed OPG to conduct a staff level analysis as part of its benchmarking studies for the next proceeding. (This issue is discussed more fully in Section 4.2, Benchmarking.) ScottMadden also conducted a pilot top-down staffing analysis for a single OPG function: the Radiation Protection Function. ScottMadden concluded that there was room for a potential reduction of 48 FTEs (28%) in the Radiation Protection Function, of which 13 FTEs could be eliminated altogether. Despite these findings, OPG failed to act on an opportunity to eliminate 13 FTEs, and instead eliminated only one.[40] This is only a single example concerning relatively few positions, but the Board is concerned that OPG has not acted more aggressively in a case where it has clear information that a particular function is overstaffed. Although collective agreements may make it difficult to eliminate positions quickly, it is not reasonable for ratepayers to bear these additional costs in the face of strong evidence that the positions are in excess of reasonable requirements. With 20 to 25% of staff expected to retire between 2010 and 2014, the Board concludes that OPG has a timely opportunity to review its organizational structure, taking actions to reassign functions and eliminate positions. The Board is not suggesting that a specific percentage of the retiring staff will not need to be replaced, but this may provide an opportunity for reducing the overall staffing complement without disrupting negotiated commitments with the unions.

As to the compensation, the Board finds that the compensation benchmark should generally be set at the 50th percentile. OPG suggests there is no evidence to support this conclusion, but the Board disagrees. This target level is consistent with the recommendations of the Agency Review Panel for executive employees, and indeed for management employees, OPG uses the 50th percentile as the benchmark. In the Board's view, there would need to be strong evidence to conclude that a higher percentile is warranted for non-management staff. OPG provided no such compelling evidence, but merely asserted that positions in the nuclear business required greater skills overall than the comparators. There was no documentation or analysis to support these assertions.

The evidence provided does not substantiate the assertion that the positions selected by OPG are sufficiently different to warrant the use of the 75th percentile. Although OPG stressed that its work requirements (particularly on the nuclear side) are highly

[39] Exh. F5-1-2, p. 26.
[40] Tr. Vol. 3, p. 27.

technical, the Board observes that many of the comparators in the Towers Perrin study would also require highly technical skills, and some of the comparators also operate nuclear facilities. Indeed the job classifications used in the Towers Perrin report are compared against each other on the basis that they are at least broadly speaking comparable. A number of the positions selected by OPG, such as labourer, also do not appear to be specifically related to highly technical nuclear plant work. In addition, most of the comparators were similarly large and unionized, and perform highly technical, though not necessarily nuclear plant, work. The Board recognizes that the analysis conducted by OPG to produce the chart is not comprehensive, and indeed was not likely intended to be comprehensive. Well over half of OPG's employees are not covered by the 30 positions listed in the chart. The data was not specifically prepared for the purpose of conducting a comprehensive comparison, and the data used in preparing the chart references base salary only.[41] Despite these limitations, the analysis provides sufficient evidence to conclude that for a significant proportion of OPG's staff the compensation is excessive based on market comparisons.

PWU argued that the comparative analysis, which uses non-nuclear entities, is not evidence of imprudence by OPG, and therefore there is no evidence to rebut the presumption that the expenses arising from the collective agreements are prudent. The Board does not agree.

The ratepayers should only be required to bear reasonable costs – and in determining reasonable costs the Board can be guided by market comparisons. It is the responsibility of the Board to send a clear signal that OPG must take responsibility for improving its performance. In order to achieve this, the Board will reduce the allowance for nuclear compensation costs by $55 million in 2011. This amount is derived by considering a number of factors:

- Reducing the compensation for the 30 positions from the Towers Perrin data would require a reduction of $37.7 million.
- Given the breadth of positions in the analysis and the prevailing pattern that wages are well in excess of the 50th percentile, it is reasonable to conclude that the same pattern exists for the vast majority of all staff positions in the company. There was certainly no evidence to suggest otherwise. Therefore, the total

[41] The Towers Perrin survey was filed confidentially with the Board as undertaking J8.5. The Towers Perrin Survey includes data both for base salary and total cash compensation. However, OPG appears to have used only the base salary information in preparing the chart. See Tr. Vol. 8, pp. 175-176.

adjustment to move all regulated staff to the 50th percentile is substantially in excess of $37.7 million.

- In determining the appropriate adjustment, the Board recognizes that it will be difficult for OPG to make significant savings through compensation levels alone in the short to medium-term given the collective agreements with its unions.
- OPG has already indicated that there will be no increase in management salaries through April 1, 2012, and this reduction was not incorporated into the original filing.
- The ScottMadden benchmarking analysis supports the conclusion that there is excess staff overall and that this is one component of OPG's relatively poor performance (in comparison to its peers). A further reduction in the allowance for compensation is warranted for this factor.
- The ScottMadden benchmarking analysis also demonstrates that OPG's overall performance is poor on certain key benchmarks, for example non-fuel operating costs. Compensation is a significant cost driver for this metric, and OPG's poor ranking supports the Board's decision to make reductions on account of compensation costs

The same reduction will apply in 2012, but there will also be an additional reduction of $35 million to represent further progress toward the 50th percentile, further progress in reducing excess headcount, and further progress toward achieving a reasonable level of cost performance. The total reduction for 2012 is $90 million.

While a more aggressive reduction was argued by some intervenors, the Board recognizes that changes to union contracts, to staffing levels and movement to the 50th percentile benchmark will take time. Indeed, the Board recognizes that OPG may not be able to achieve $145 million in savings in the test period through compensation reductions alone. The Board is making these adjustments so that payment amounts are based on a reasonable level of performance. If costs are in excess of a reasonable level of performance, then those excess costs are appropriately borne by the shareholder.

The Board is allocating this adjustment solely to the nuclear business for the purposes of setting the payment amounts. The Board is not ordering any reductions for the hydroelectric business because the benchmarking evidence for that business supports the conclusion that it is operated reasonably efficiently from an overall perspective, and therefore the Board is less concerned with the specific compensation levels for that part

of the company. For the nuclear business the evidence is clear that overall performance is poor in comparison to its peers and the staffing levels and compensation exceed the comparators. On this basis an adjustment is necessary to ensure the payment amounts are just and reasonable.

Lastly, the Board directs OPG to conduct an independent compensation study to be filed with the next application. As noted above, OPG's compensation benchmarking analysis to date has not been comprehensive. The Board remains concerned about compensation costs, in light of the company's overall poor nuclear performance, and would be assisted by a comprehensive benchmarking study comparing OPG's total compensation with broadly comparable organizations. The study should cover a significant proportion of its positions. Compensation costs are a signification proportion of the total revenue requirement; OPG's position that such a study would be too expensive and of little value is therefore not reasonable. Consultation with Board staff and stakeholders concerning the scope of the study, in advance of issuing a Terms of Reference, is advised. The costs of the study are to be absorbed within the overall revenue requirement allowed for in this Decision. This has been already accounted for in the Regulatory Affairs budget, which anticipates studies in support of the company's next application.

6.2 Pension and Other Post Employment Benefits

Costs related to Pension and Other Post Employment Benefits ("OPEB") for the test period were forecast based on discount rates and assumptions in OPG's 2010-2014 business plan. The total amount requested for the test period is approximately $633 million. On September 30, 2010, OPG filed an Impact Statement in which it identified a significant decline in discount rates causing an increase in forecast pension and OPEB costs for the test period. Rather than revising the proposed revenue requirement, OPG requested approval for a variance account, "to record the revenue requirement impact of differences between forecast and actual pension and OPEB costs." The total forecast increase as a result of the update is $264.2 million, as summarized in the following table.

Table 18: Updated Pension and OPEB Costs ($ million)

	Nuclear		Regulated Hydroelectric	
	2011	2012	2011	2012
Pension Cost				
As per Chart 9, Exh.F4-3-1	$114.0	$162.8	$5.8	$8.1
Projection as of August 2010	210.2	245.9	10.6	12.3
Increase	96.2	83.1	4.8	4.2
OPEB Cost[1]				
As per Chart 9, Exh.F4-3-1	159.3	166.7	8.0	8.3
Projection as of August 2010	196.5	201.7	9.9	10.1
Increase	37.2	35.0	1.9	1.8
Total Test Period Increase		**$251.5**		**$12.7**

Note 1: Supplementary pension plans costs are included with OPEB costs
Source: Exh. N-1-1

Board staff submitted that it would be more appropriate for OPG to determine pension and OPEB costs on a cash basis because costs determined on that basis are more stable for ratemaking purposes than those calculated on an accounting basis. In support of its position, Board staff provided a table in its submission that illustrated pension and OPEB payments on an accounting basis as well as a cash basis. On a cash basis, the table identified a total amount of $568 million. This position was supported by CCC, CME, and SEC.

In reply, OPG noted that the Board had approved the accrual method in the previous case and argued that no evidence had been introduced on the cash method in the current proceeding. OPG pointed out that the Board staff tables did not reflect updated pension contributions for 2011 and 2012, as provided by Mercer. OPG maintained that including the updates demonstrates that the cash basis is no more stable than the accounting basis. As noted in OPG's reply submission, there are utilities regulated by the Board using the cash basis and others using the accounting basis.

Board staff further submitted that the variance account request should be denied, and its position was supported by CCC, CME, SEC and VECC. Board staff raised two materiality arguments in its submission. Staff noted that OPG had not informed its shareholder of the increased forecast cost as OPG suggested the increase was not material, and that balances in the Hydro One transmission pension variance account for

the last two proceedings have not been material. On the first point, OPG replied that seeking shareholder approval before applying for a variance account is not an established requirement. On the second point, OPG maintained that there is no evidence that OPG's variances will be similar to the immaterial balances recorded by Hydro One.

VECC submitted that the Hydro One pension and OPEB variance accounts for its distribution business and its transmission business were established under specific and unique circumstances and should not be accepted as precedents by the Board. VECC maintained that the accounts are "not the result of decisions wherein the Board actually turns its mind to the appropriateness of allowing HONI to be fully protected from the risk associated with its pension cost forecasts."[42] OPG challenged this view and argued that the Hydro One decision confirmed that balances in the variance account would be subject to a prudence review.

In the previous proceeding the Board denied OPG's request for a pension and OPEB variance account. Board staff submitted that had the account been approved, an estimated $314 million credit to ratepayers would have been recorded for the period 2008 to 2010. This led staff to conclude that the request in the current proceeding should be denied because the pension and OPEB amounts included in the current application are lower than what OPG now believes it will incur in the test period. OPG responded that staff's conclusion amounts to retroactive ratemaking and further, that the staff analysis is not correct. Staff's analysis reflects a full year for 2008, but in OPG's view should reflect only 9 months. OPG also argued that staff has grossly overestimated the 2010 variance.

OPG also disagreed with the Board staff submission on pension and OPEB in three other areas:

- Board staff submitted that if the Board allows OPG to collect the forecast accounting OPEB costs, the variance should be placed in a segregated fund. OPG doubted whether the Board has jurisdiction to implement the proposal. SEC also disagreed with staff, expressing its concern with the precedent;
- Staff submitted that the undisclosed tax impact related to the amount to be tracked in the variance account is approximately $91 million. OPG responded that Board staff is incorrect in submitting that the consequences of taxes

[42] VECC Argument, para. 134.

regarding the update have not been identified, citing updates to the pre-filed evidence; and

- Board staff submitted that OPG should provide evidence that discusses alternatives to AA bond yields to forecast discount rates. In reply, OPG cited sections of the CICA handbook and asserted that the use of AA bond yields was appropriate.

Board Findings

OPG correctly points out that there is currently no consistency amongst utilities in the use of either the cash or accrual method to setting pension and other post employment benefit expenses. Both methodologies have been approved by the Board. The Board in this case sees no compelling reason to change OPG's existing approach of using the accrual method. Consistency in accounting treatment, in order to compare results year to year, is advantageous for purposes of assessing the level of costs for reasonableness. A consistent approach over time also ensures a greater level of fairness for ratepayers and the company.

The request for a variance account is denied. Pension and OPEB costs should be included in the forecast of expenses in the same way as other OM&A expenses, and then managed by the company within its overall operations. The Board finds that the forecast included in the pre-filed evidence was more rigorous because it was based on a set of internally consistent assumptions, while the update is based on the AA bond yields which will change. Accordingly, the Board finds that the allowance for pension and OPEB expenses in the pre-filed evidence is appropriate, as it is the best evidence on this matter.

The Board is reluctant to make selective updates to the evidence. The bond yields have changed, and will continue to change, as noted by the actuary in the updated statement. Further, the Board notes that the financial market conditions are variable and have indeed improved since the impact statement was filed. The Board concludes that an adjustment to the allowance is not warranted.

The Board sees no reason to depart from the use of AA bond yields at this time, with the exception of using more current data. However, OPG is directed to provide a fuller range and discussion of alternatives to the use of AA bond yields to forecast discount rates in its next application.

6.3 Centralized Support and Administrative Costs

Centralized Support and Administrative Costs include Corporate Support and Administrative Service Groups ("Corporate Support"), Centrally Held Costs and Hydroelectric Common Services that are related to the operation of OPG's business units. The costs are assigned/allocated to OPG's regulated and non-regulated businesses. The Centralized Support and Administrative Costs budget assigned/allocated to the regulated hydroelectric business totals $57.5 million in 2011 and $60.9 million in 2012. The amount assigned/allocated to the nuclear business totals $448.1 million for 2011 and $486.6 million for 2012. Details are set out in the following table.

Table 19: Allocation - Centralized Support and Administrative Costs

($ million)	2011 Plan	2012 Plan
Hydroelectric		
Corporate Support	$24.7	$26.1
Centrally Held	22.9	25.5
Common Hydroelectric	9.9	9.3
Total	57.5	60.9
Nuclear		
Corporate Support	249.1	252.3
Centrally Held	199.0	234.3
Total	**$448.1**	**$486.6**

Source: Exh. L-1-90, Exh. F3-1-1, Tables 2 and 3, Exh. F4-4-1, Tables 2 and 3

6.3.1 Corporate Support Costs

Corporate Support service group activities include Real Estate, Energy Markets, Business Services, IT, Finance, Corporate and Executive Services (Public Affairs, Regulatory/Strategic Planning, Emergency Preparedness, Law) and Human Resources. For these services OPG seeks approval for $24.8 million in 2011 and $26.3 million in 2012 for the regulated hydroelectric business, and $249.2 million in 2011 and $252.3 million in 2012 for the nuclear business. The budgeted and actual amounts for the years 2007 to 2012 are set out in the following table.

Table 20: Allocated Corporate Support Costs

($ million)	2007 Budget	2007 Actual	2008 Budget	2008 Actual	2009 Budget	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Hydroelectric	$23.3	$21.9	$28.3	$26.3	$28.9	$24.9	$25.1	$24.8	$26.3
Nuclear	$250.5	$240.7	$269.1	$237.6	$267.4	$234.5	$247.0	$249.0	$252.3

Source: Exh. F3-1-2, Tables 1 and 2

OPG filed two corporate function benchmark reports, one on Human Resources and the other on Finance. No submissions were filed on these reports.

In response to direction in the previous payment amounts decision, OPG retained Black & Veatch to review the cost allocation methodology with respect to the Board's three prong test (cost incurrence, cost allocation and cost/benefit). Black & Veatch concluded that OPG's cost allocation methodology meets current best practices and meets all aspects of the three prong test. No submissions were filed on corporate cost allocation.

Board staff commented on the Regulatory Affairs component of the Corporate Support costs. Board staff submitted that the Regulatory Affairs budget should be reduced by $2.238 million in 2011 and by $1.908 million in 2012. The Board staff submission was based on comparisons with 2008 actuals as a benchmark rate case year and 2009 actuals as a benchmark non-rate case year. Staff also submitted that there was no basis for the forecast increase in the Board's annual assessment. Board staff's position was supported by SEC and VECC and referenced by CCC in its submission.

OPG responded that the Board should reject Board staff's proposed cuts because they are based on faulty premises. OPG maintained that the 2008 Regulatory Affairs costs do not reflect all the costs related to the last application, as substantial costs were incurred and recorded in 2007. OPG also argued that the previous case is not a proxy for future proceedings because more work from other business units has shifted to Regulatory Affairs and the effort related to applications has increased. OPG noted that the next application will involve substantial issues, for example, IFRS and the Niagara Tunnel, and any studies directed by the Board in this proceeding. OPG also noted that in 2011 substantial resources will be required to assess incentive mechanisms, including stakeholder consultations. OPG also pointed out that the Regulatory Affairs budget includes costs for OPG's participation in the upcoming IPSP, IESO market rules development and OPG's strategic planning process.

CCC made submissions on the overall Corporate Support costs, arguing that they should be reduced because the costs appear discretionary at some level and there is a pattern of actual costs coming in below forecast. CCC submitted that the hydroelectric business costs should be reduced by the average of the variances over the three year period, amounting to a $2.46 million reduction for the hydroelectric allocation and a $24.7 million reduction to the nuclear business allocation.

OPG took issue with CCC's premise that OPG's historical under spending in Corporate Support warrants a cut to the amounts requested for the test period. OPG pointed to the variance explanations found in the evidence, which included the impact of Information Technology Special Initiatives, lower New Horizon System Solutions outsourcing agreement gainshare, deferrals such as the 2010 rate application, decreased advertising, one-time IT credit adjustments, and the management of staff vacancies. OPG noted that as a result of its cost control initiatives, the increase in allocated support costs in the test period is 1.2% annually, much less than the rate of inflation and expected growth.

Board Findings

The Board accepts OPG's evidence on the benchmarking studies and the cost allocation methodology.

OPG has provided credible evidence for the increase in the Regulatory Affairs costs. Accordingly, the Board will not direct any specific reduction to the Regulatory Affairs test period forecast.

The Board agrees with the submissions of CCC that there has been a history of under spending in the Corporate Support function and, in fact, the amount of under spending has been increasing from 2007 to 2009. The Board expects the cost savings impact of the efficiency improvement initiatives undertaken by OPG to be reflected in the company's forecasted budgets. History indicates that this has not been the case. However, for this test case period, the proposed budget is not unreasonable given 2009 actual spend and the 2010 budget. In addition, the Board's decision on compensation may affect total corporate support costs. For these reasons the Board will make no further adjustments to the budget.

6.3.2 Centrally Held Costs

Historic and forecast of test period centrally held costs are summarized in the following table.

Table 21: Centrally Held Costs ($ million)

Corporate Costs	2007 Actual	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
Pension/OPEB Related Costs (1)	$178.8	$116.7	$(27.7)	$118.5	$145.4	$213.1
OPG-Wide Insurance	19.1	16.3	17.0	16.9	17.4	18.0
Nuclear Insurance	7.6	7.8	7.3	8.6	11.3	13.4
Performance Incentives	40.8	45.3	40.3	45.8	46.2	46.7
IESO Non-Energy Charges	20.5	22.4	75.5	54.7	62.8	69.2
SR&ED Investment Tax Credits	0.0	(30.0)	(22.1)	(10.0)	(10.0)	(10.0)
Other	31.1	25.0	31.4	26.4	28.1	(1.4)
TOTAL	**$297.9**	**$203.5**	**$121.7**	**$260.9**	**$301.2**	**$349.0**

Note 1: Excludes current service costs included in compensation Table 17
Source: Exh. F4-4-1, Table 1

Similar to the corporate support costs, Black & Veatch reviewed the allocation of centrally held costs and came to the same conclusions.

Submissions were filed on pension and OPEB related costs, IESO non-energy charges, and nuclear insurance. Pension and OPEB costs are addressed earlier in this chapter, and IESO non-energy charges are addressed in Chapter 10. Nuclear insurance costs are addressed here.

Board staff submitted that the proposed increase in nuclear insurance costs should not be included in the revenue requirement, because the increase is based on federal government requirements which are in a proposed bill at the second reading stage. Similar bills have been introduced by the federal government numerous times in the past but all have failed to receive Royal Assent. SEC similarly submitted that it is premature to assume that nuclear insurance costs will increase and the appropriate cost level to use is the average for the last four years, $7.8 million per year.

OPG responded that it is appropriate and prudent to include the forecast nuclear insurance costs based on the proposed legislation. OPG establishes an operating budget through the annual business planning process, and it must operate within this budget. OPG stated that the timing related to the increase in nuclear insurance costs is uncertain, but that the forecast represents OPG's best estimate.

Board Findings

The Board agrees it is premature to increase nuclear insurance costs because of a bill that is still being debated by the federal government. The Board will reduce the 2011 proposed amount for nuclear insurance costs by $2.5 million, resulting in $8.8 million for 2011. This was obtained by taking the 2010 budget for nuclear insurance costs and increasing for inflation. The amount to be included for 2012 is $9 million.

6.4 Depreciation

OPG seeks approval for depreciation and amortization expense of $130.6 million for the regulated hydroelectric facilities and $491.8 million for the nuclear facilities for the test period. The nuclear station end of life assumption impacts on depreciation expense are discussed in Chapter 8.

OPG's internal Depreciation Review Committee ("DRC") is accountable for providing engineering, technical and financial review of asset service lives. Board staff observed that the 2009 DRC report showed a trend of increases to the useful lives of many nuclear assets resulting in annual reductions to depreciation expense starting in 2010. Board staff argued that OPG's depreciation expense may be overstated as the DRC has not completed its review of all nuclear assets, and the trend of increasing useful life is likely applicable. Board staff also submitted that the Board should direct OPG to file an independent depreciation study for its regulated facilities and the Bruce stations. Board staff noted that the Board has required this filing for other large utilities. SEC supported the staff submission.

OPG responded that the nuclear assets that have not been reviewed by the DRC are of a different nature and that it is unlikely that their service lives would be increased. OPG also pointed out that the majority of OPG's nuclear asset class lives are capped by assumptions for life limiting components for station life even if the asset could last longer.

OPG argued that an independent depreciation study would increase costs without providing value. While comparative data is likely available for hydroelectric assets, OPG argued that an independent consultant would have to rely on OPG's expertise for nuclear assets. OPG also referred to the Ganett Fleming report on OPG's depreciation review process which was filed in the previous proceeding. OPG stated that the report

concluded that OPG's DRC process was adequate and did not burden the ratepayer with the cost of new systems or processes.

Board Findings

As discussed elsewhere in this Decision, the Board has accepted the end of service life estimates for the prescribed facilities as filed by OPG, including the extended service life for Darlington. No other issues were raised with respect to the depreciation expense for the test period.

The Board is satisfied with OPG's approach for the test period and notes that no concerns were raised with respect to the upward revisions related to the assets reviewed by the DRC. The Board further accepts OPG's explanation regarding the assets which were not reviewed and concludes that there is no evidence to indicate that OPG's depreciation levels are unreasonable for the test year. The Board will, however, direct OPG to file an independent depreciation study at the next proceeding. While the Ganett Fleming report commented on the process being followed it is important to also have an independent assessment of the assets. As noted in several submissions, an independent study is a typical requirement of utilities, conducted periodically. Given the level of depreciation expense involved, the Board concludes there is merit in OPG also providing such a study. Such a study provides assurance to the Board and all parties that the depreciation and amortization expenses, which are significant, are reasonable.

6.5 Taxes

OPG uses the taxes payable method for determining regulatory income tax of the prescribed facilities. The tax is allocated based on each business's regulatory taxable income. OPG seeks approval of test period income tax expense of $58.0 million and $129.8 million for the regulated hydroelectric and nuclear facilities respectively.

SEC submitted that tax deductions taken by OPG prior to April 1, 2008, amounting to $1,660.4 million, should be available for deduction by ratepayers and that there should be no regulatory tax liability for the test period. This matter is discussed in the tax loss variance account section in Chapter 10.

The Harmonized Sales Tax ("HST") came into force in Ontario on July 1, 2010. Utilities that received rate orders from the Board in early 2010 or before have been recovering applicable Ontario Retail Sales Tax in rates as part of their revenue requirement. In

order to forecast the correct costs for 2011 cost of service applications, the embedded RST (or provincial sales tax) must be removed.

Board staff and SEC submitted that the revenue requirement impact of the HST input tax credits is a reduction of $6.0 million per annum, not the amount of $5.0 million included in the application.

In reply, OPG stated that the $6.0 million estimate is only based on 3 months of data which is unlikely to be representative. OPG also stated that HST is not a discrete entry, but forms part of the expenditure on underlying items. Further, OPG stated that increases in HST savings only occur as a result of increases in underlying costs attracting the tax.

Staff submitted that OPG should report back to the Board in its next application with details of twelve months of HST returns and the input tax credit ("ITC") amounts related to the prescribed facilities. OPG replied that the information may not be meaningful because the ITC amounts do not necessarily correspond to HST savings. OPG also noted that producing such a report was resource intensive, and that the results would be corporate based and need to be allocated to the prescribed facilities.

Board Findings

The Board accepts OPG's evidence with respect to HST. There was little substantial evidence to support the changes proposed by Board staff and the suggested differences are well below the materiality threshold. The Board therefore accepts OPG's evidence as being reasonable. The Board will not direct OPG to provide details regarding its HST returns. The Board will however expect OPG to continue to demonstrate that the impacts of HST have been appropriately incorporated into its forecasts.

7 BRUCE LEASE – REVENUES AND COSTS

OPG leases the Bruce A and Bruce B generating stations and associated lands and facilities to Bruce Power. Sections 6(2)9 and 6(2)10 of O. Reg. 53/05 provide that the Board shall ensure that OPG recovers all the costs it incurs with respect to the Bruce nuclear generating stations, and that any revenues it earns from the Bruce Lease in excess of costs will be used to offset the nuclear payment amounts.

The decision of the previous payment amounts proceeding found that the Bruce generating stations should not be treated as if they were regulated facilities. OPG was directed to calculate all Bruce revenues and costs in accordance with GAAP for non-regulated businesses.

Bruce revenues are derived from base and supplemental payments as set out in the Bruce Lease, used fuel storage and long term disposal services, low and intermediate waste management services, and support and maintenance services as set out in the Bruce Site Services Agreement. Costs include depreciation, which includes asset retirement costs, taxes, accretion, earnings/losses on nuclear segregated funds, the cost of used fuel storage and disposal, and the cost of waste management.

Black & Veatch reviewed OPG's methodology for assigning and allocating revenue and cost to the Bruce facilities and under the Bruce Lease. Black & Veatch found the methodology to be appropriate and compliant with the Board's decision in the previous proceeding.

The Bruce Lease net revenues are forecast to be $128.1 million in 2011 and $143.0 million in 2012, as shown in the table below. If approved, these amounts would offset the nuclear revenue requirement.

Table 22: Bruce Lease Forecast Revenues and Costs

($ million)	2011 Plan	2012 Plan
Bruce Lease Revenues	$254.4	$268.7
Bruce Lease Costs		
Depreciation	34.5	34.5
Property Tax	13.6	14.1
Capital Tax	0.0	0.0
Accretion	294.5	307.2
(Earnings) Losses on Segregated Funds	(286.2)	(304.6)
Used Fuel Storage and Disposal	17.0	24.0
Waste Management Variable Expenses	0.8	0.7
Interest	11.9	6.9
Total Costs Before Income Tax	86.1	82.8
Income Tax – Current	0.0	8.6
Income Tax - Future	40.2	34.3
Total Bruce Lease Costs	126.3	125.7
Bruce Lease Net Revenues	**$128.1**	**$143.0**

Source: Exh. G2-2-1, Tables 1 and 5

Forecast amounts will be tracked against actual revenues and costs, and the variances will be recorded in the Bruce Lease Net Revenues Variance Account, which was established in the previous proceeding. Submissions related to the variance account can be found at Chapter 10.

The only issue raised with respect to the Bruce Lease was related to the impact on nuclear liability costs as a result of the Darlington Refurbishment Project and the new end of life date for Darlington. GEC submitted that the changes to the Bruce Lease costs that result from the 2051 end of life date for Darlington are not appropriate at this time. OPG replied that its application is consistent with GAAP accounting information as reflected in its audited financial statements. The Board's findings with respect to the Darlington Refurbishment Project can be found at Chapter 5 and the findings with respect to station end of life can be found at Chapter 8.

Board Findings

The Board approves OPG's test period forecast for the Bruce Lease net revenues. The Board finds that OPG has estimated the revenue and costs associated with the Bruce

generating station in accordance with the methodology established by the Board in the previous proceeding, including the impact arising from the change in the end of life date for Darlington.

8 NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING

OPG incurs liabilities related to decommissioning its nuclear stations (including Bruce), nuclear used fuel, and low and intermediate level waste management (collectively "nuclear liabilities" or "asset retirement obligations"). The responsibility for funding these liabilities is described in the Ontario Nuclear Funds Agreement ("ONFA"). ONFA provides for the establishment of a reference plan for nuclear liabilities which must be updated every 5 years. The current reference plan was updated in November 2006.

8.1 Methodology

The ratemaking treatment for nuclear liabilities is complex and was a matter of considerable discussion in the previous proceeding. In the previous decision, the Board approved a methodology for the recovery of nuclear liabilities that recognized a return on rate base associated with asset retirement costs ("ARC") for Pickering and Darlington. The methodology required that the return on the ARC be limited to the weighted average accretion rate, which was 5.6 % at that time. It is now 5.58%. The portion of the rate base to which the accretion rate applies is equal to the lesser of (a) the forecast amount of the average unfunded nuclear liabilities related to the Pickering and Darlington facilities, and (b) the average unamortized ARC included in the fixed asset balances for Pickering and Darlington.

Other costs associated with nuclear liabilities approved for recovery are the annual depreciation and amortization expenses associated with the ARC, and the variable expenses for the nuclear waste generated each year including expenses relating to low and intermediate level waste.

The Board approved a GAAP basis of accounting for determining the net revenue impact of nuclear liabilities associated with the Bruce facilities. Under this approach, the lease revenues and all cost items are recognized in accordance with GAAP, including accretion expense on the nuclear liabilities. Forecast earnings on the segregated funds related to the Bruce liabilities are included as a reduction of costs and an income tax (PILS) provision is calculated in accordance with GAAP.

OPG proposed to maintain the revenue requirement treatment for nuclear liabilities for Pickering, Darlington and the Bruce facilities which was approved in the previous proceeding.

In the previous decision the Board found that if there were external developments related to the ratemaking aspects of asset retirement obligations, parties could submit evidence and argue for alternative treatment in OPG's next hearing. In this application, OPG indicated that it would continue to investigate the impacts of the approved revenue requirement treatment on its ability to fully recover its nuclear liabilities, and that it may propose modifications to the existing treatment or an alternative treatment in a future application.

OPG stated that it monitors emerging issues with respect to methodologies for the recovery of asset retirement obligations across North America as part of its regular business activities. With the exception of the National Energy Board's ("NEB") review related to pipeline abandonment, OPG was not aware of any policy positions, papers or decisions related to the methodology for recovering asset retirement obligations that have been issued since the last proceeding. The NEB's ongoing review related to pipeline abandonment will examine the methodology for recovering asset retirement obligations. The company's position was that as that review was not yet complete, it would be premature to change OPG's approach at this time. CME agreed with OPG.

Board Findings

The Board agrees with OPG and CME that it would be premature to revise the existing methodology for the regulatory treatment of nuclear liabilities. The only relevant external development brought to the Board's attention is the NEB review and it is not yet complete. If the results of the NEB review, or any other external development, suggest a change in the Board's methodology may be warranted, the Board will revisit the issue in the next application.

The Board accepts the methodology used by OPG to calculate the revenue requirement impacts of OPG's nuclear liabilities.

8.2 Station End of Life Dates and Test Year Nuclear Liabilities

The following table shows the forecast amount of the average unfunded nuclear liabilities related to the Pickering and Darlington facilities and the average unamortized ARC included in the fixed asset balances for Pickering and Darlington. OPG calculated the return on rate base on the lesser of these two amounts using the average accretion rate of OPG's nuclear liabilities, which is 5.58% for the test period.

Table 23: Prescribed Facilities - Lesser of Asset Retirement Costs or Unfunded Nuclear Liability ($ million) Subject to Return Years Ending December 31, 2008, 2009, 2010, 2011 and 2012

Line No.	Description	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
	ASSET RETIREMENT OBLIGATION (ARO)					
1	Adjusted Opening Balance	$5,921.0	$6,151.2	$6,888.6	$7,136.8	$7,432.8
2	Closing Balance	6,151.2	6,391.2	7,136.8	7,432.8	7,748.0
3	Average Asset Retirement Obligation ((line 1 + line 2)/2)	6,036.1	6,271.2	7,012.7	7,284.8	7,590.4
	NUCLEAR SEGREGATED FUNDS BALANCE					
4	Adjusted Opening Balance	4,829.9	4,584.2	5,058.7	5,399.6	5,778.5
5	Closing Balance	4,584.2	5,058.7	5,399.6	5,778.5	6,160.7
6	Average Nuclear Segregated Funds Balance ((line 4 + line 5)/2)	4,707.0	4,821.5	5,229.2	5,589.1	5,969.6
	UNFUNDED NUCLEAR LIABILITY BALANCE (UNL)					
7	Adjusted Opening Balance (line 1 - line 4)	1,091.1	1,567.0	1,829.9	1,737.2	1,654.3
8	Closing Balance (line 2 - line 5)	1,567.0	1,332.5	1,737.2	1,654.3	1,587.3
9	Average Unfunded Nuclear Liability Balance ((line 7 + line 8)/2)	1,329.1	1,449.7	1,783.5	1,695.7	1,620.8
	ASSET RETIREMENT COSTS (ARC)					
10	Adjusted Opening Balance	1,345.7	1,221.7	1,573.1	1,539.9	1,506.7
11	Closing Balance	1,221.7	1,098.0	1,539.9	1,506.7	1,473.5
12	Average Asset Retirement Costs ((line 10 + line 11)/2)	1,283.7	1,159.8	1,556.5	1,523.3	1,490.1
13	**LESSER OF AVERAGE UNL OR ARC**	**$1,283.7**	**$1,159.8**	**$1,556.5**	**$1,523.3**	**$1,490.1**

Note: The 2010 adjusted opening balances for ARO and ARC include increases of $497.4 million and $475.2 million respectively for recognition of the Darlington Refurbishment Project.

Source: Exh. C2-1-2, Table 1

The test period revenue requirement impact of nuclear liabilities is $291.3 million for Pickering and Darlington and $110.3 million for the Bruce facilities. The following table summarizes historic and test period revenue requirement impacts.

Table 24: Revenue Requirement Impact of OPG's Nuclear Liabilities ($ million)

Line No.	Description	2008 Actual	2009 Actual	2010 Budget	2011 Plan	2012 Plan
	PRESCRIBED FACILITIES					
1	Depreciation of Asset Retirement Costs	$124.0	$123.8	$33.2	$33.2	$33.2
2	Used Fuel Storage & Disposal Variable Expenses	19.0	19.2	23.0	26.6	28.5
3	Low & Intermediate Level Waste Management Variable Expenses	1.7	3.5	1.1	0.8	0.8
	Return on Rate Base:					
4	Accretion Rate	53.9	65.0	86.9	85.0	83.1
5	Weighted Average Cost of Capital	17.8	0.0	0.0	0.0	0.0
6	**Total Revenue Requirement Impact**	**$216.4**	**$211.5**	**$144.2**	**$145.7**	**$145.6**
	(line 1 + line 2 + line 3 + line 4 + line 5)					
	BRUCE FACILITIES					
7	Depreciation of Asset Retirement Costs	$48.6	$48.5	$28.5	$28.5	$28.5
8	Used Fuel Storage & Disposal Variable Expenses	14.0	14.4	16.7	17.0	24.0
9	Low & Intermediate Level Waste Management Variable Expenses	11.2	4.4	0.9	0.8	0.7
10	Accretion	200.6	279.3	282.4	294.5	307.2
11	Less: Segregated Fund Earnings (Losses)	(138.0)	386.2	268.8	286.2	304.6
12	Return on Rate Base	15.4	0.0	0.0	0.0	0.0
13	**Total Revenue Requirement Impact**	**$427.6**	**$(39.5)**	**$59.6**	**$54.5**	**$55.8**
	(line 7 + line 8 + line 10 - line 11 + line 12)					

Source: Exh. C2-1-2, Table 5

The revenue requirement impact of the nuclear liabilities for the prescribed facilities decreases significantly in the period 2010-2012 as a result of OPG's decision to move to the definition phase of the DRP. The consequential impacts of the decision to proceed with the definition phase of the DRP are discussed in Chapter 5.

There was considerable examination in the proceeding of the effect of station end of life dates on the revenue requirement impacts of nuclear liabilities.

As noted in Chapter 5, OPG has assumed an end of life of 2051 for Darlington. The impacts of that decision on revenue requirement are discussed there, as is the Board's acceptance of that decision for rate-making purposes.

In addition, several issues were raised in relation to the appropriateness of the end of service life dates for Pickering A and Pickering B nuclear stations. For accounting and depreciation purposes, the end of service life date for Pickering B is September 30, 2014 and for Pickering A (units 1 and 4) it is December 31, 2021. OPG did not change the end of service life of the Pickering B station, even though the company is currently undertaking work designed to extend the life of two units to 2018 and the other two units to 2020. In addition, without the continued operations of Pickering B, the evidence is that it would be quite unlikely that Pickering A would continue operations because the two stations are operationally and economically interdependent. In summary, the station end of life dates are chosen on the basis of the level of certainty which exists regarding the DRP and the Pickering B Continued Operations project. OPG has a high level of confidence regarding the DRP and only a medium level of confidence regarding the Pickering B project.

All station end of life dates were recommended by OPG's Depreciation Review Committee ("DRC") in its 2009 report and approved by OPG senior management to be effective on January 1, 2010.

The station end of life dates affect the valuation of the asset retirement obligations and consequently ARC. Specifically, the decision to proceed with the DRP changes the valuation of the nuclear used fuel and decommissioning liabilities and the ARC for the prescribed facilities and the Bruce facilities. The changes in the asset retirement obligations and the ARC result in revenue requirement changes related to the return on rate base, depreciation expense, used fuel storage and disposal variable expense and income taxes for the prescribed facilities. For the Bruce facilities, the revenue requirement is impacted by changes to depreciation expense, accretion expense, used fuel storage and disposal variable expense and income taxes.

As noted in the DRP section of this Decision, the revenue requirement impact of the DRP is a considerable. The most significant contributor is a reduction in depreciation expense of $229.6 million arising from Darlington's asset retirement costs and the extension of service life impacts. Essentially, the obligations related to decommissioning the stations and dealing with the used fuel are pushed further into the

future, thereby reducing the revenue requirement in the current period. These revenue requirement reductions are offset to some extent by the increased amount of used fuel.

OPG asserted that the accounting changes it has implemented to reflect the DRP and an end of life of 2051 are based on its accounting rules which are in accordance with GAAP. Some parties suggested that for regulatory accounting purposes, the end of station life for Darlington could remain at 2019.

As noted in the DRP chapter, there was considerable discussion about the scope of the Board's approval of the DRP. SEC cross-examined OPG on the connection between the scope of the Board's approval of the DRP and OPG's application with respect to depreciation and nuclear liabilities.

> MR. REEVE: There was a discussion around the approval of the Darlington refurbishment project; that's correct.
> MR. SHEPHERD: And you are not asking for approval of that. But I am right, am I not, that the depreciation expense and the asset retirement expense in the current application for Darlington assume that Darlington will be refurbished?
> MR. REEVE: That's correct.
> MR. SHEPHERD: And so if this Board approves the depreciation expense and the asset retirement expense – or, sorry, the decommissioning expense, it is on the assumption that Darlington refurbishment will take place?
> MR. REEVE: From an accounting standpoint, yes.[43]

Parties also queried OPG's decision to delay its determination as to whether to extend the station life of Pickering B under the Continued Operations project until 2012, and the dependence of Pickering A operations on Pickering B operations. OPG stated that it does not plan to operate the two units at Pickering A if Pickering B were to be closed in 2014 as this would result in significant technical and economic challenges to operate Pickering A alone.

OPG argued that its evidence is consistent with GAAP. With respect to Pickering B, OPG explained that it does not revise station end of life dates for depreciation purposes until it has a high degree of confidence in revised service life dates. As noted in the section of this decision on DRP, OPG stated that its Board of Directors has decided to proceed with the DRP by moving into the definition phase, and that the Province has

[43] Tr, Vol. 10, p. 102.

concurred with this decision. The internal DRC has high confidence that the refurbishment will proceed and hence recommended the Darlington end of life date of 2051.

OPG was asked to recalculate the impacts on the revenue requirement using a number of different scenarios for the station end of life. These alternative scenarios were as follows:

- Scenario 1A assumed that Darlington would be refurbished as planned and would operate until 2051, and that both Pickering A and Pickering B would continue to operate until 2020 and 2019, respectively, in accordance with current plans for Pickering B Continued Operations.

- Scenario 2 assumed that the DRP would not proceed and Darlington would therefore close in 2019. Both Pickering A and Pickering B would also close in 2014, assuming the Pickering B Continued Operations project does not proceed, because it would not be practical to operate Pickering A without Pickering B.

- Scenario 3 assumed no change in the status of Pickering A and B from that assumed in the application, but that the DRP would not proceed and that Darlington would therefore close in 2019.

- Scenario 4A assumed that the DRP would not proceed and Darlington would therefore close in 2019. This scenario also assumed that the Pickering B Continued Operations project goes ahead and therefore Pickering A and Pickering B would continue to operate until 2020 and 2019, respectively.

The analysis assumed that all other programs and expenditures were as proposed in the application (including CWIP for the DRP). The revenue requirement impact summarized in the following table is relative to the revenue requirement impact presented in the application (a reduction of $197.1 million).

Table 25: Summary of Test Period Revenue Requirement Impacts For Station End of Life Scenarios ($ million)

Description	Scenario 1A	Scenario 2	Scenario 3	Scenario 4A
PRESCRIBED FACILITIES				
Return on Rate Base:				
Accretion Rate on Lesser of ARC and UNL	3.2	(88.3)	(73.2)	(76.6)
Changes to Nuclear Station Service Life Impacts	4.0	(34.5)	(7.3)	(3.4)
Total Return on Rate Base Impact	7.2	(122.8)	(80.6)	(80.0)
Depreciation Expense:				
Asset Retirement Costs	28.2	190.9	181.1	139.4
Changes to Nuclear Station Service Life Impacts	(26.5)	227.8	48.5	22.4
Total Depreciation Expense Impact	1.7	418.7	229.6	161.8
Other Expenses:				
Used Fuel Storage and Disposal Variable Expenses	0.0	0.0	(8.2)	0.0
Income Taxes:				
Accretion Rate on Lesser of ARC and UNL	1.1	(30.6)	(25.3)	(26.5)
Changes to Nuclear Station Service Life Impacts	0.6	(5.6)	(1.2)	(0.5)
Depreciation Expense on Asset Retirement Costs	9.8	66.2	62.8	48.4
Used Fuel Storage and Disposal Variable Expenses	0.0	0.0	(2.8)	0.0
Depreciation Expense - Changes to Station Lives	(9.2)	79.0	16.8	7.8
Total Income Tax Impact	2.4	109.1	50.2	29.0
Total Revenue Requirement Impact - Prescribed	**11.3**	**405.1**	**191.0**	**110.8**
BRUCE FACILITIES				
Rate Base	0.0	0.0	0.0	0.0
Depreciation Expense Impact: Asset Retirement Costs	(1.7)	96.4	40.2	82.6
Other Expenses:				
Accretion	(2.8)	56.0	18.3	48.7
Used Fuel Storage and Disposal Variable Expenses	0.0	0.0	(4.2)	0.0
Total Other Expenses Impact	(2.8)	56.0	14.1	48.7
Income Taxes:				
Impact on Bruce Facilities' Income Tax Calculation	1.2	(38.8)	(13.9)	(33.4)
Impact on Prescribed Facilities' Income Tax Calculation	(1.2)	39.4	14.0	33.9
Total Income Tax Impact	0.0	0.6	0.1	0.5
Total Revenue Requirement Impact - Bruce	**(4.6)**	**153.0**	**54.4**	**131.7**
Total Revenue Requirement Impact	**6.7**	**558.1**	**245.4**	**242.5**

Source: J10.11 (Attachment 1 - Table 1 and Attachment 3 - Table 1) and J10.11 Addendum 2 (Attachment 1A - Table 1 and Attachment 4A - Table 1)

Board staff noted that the adoption of any of the scenarios for ratemaking purposes would introduce a separate and second set of books that may differ significantly from OPG's GAAP-based financial accounting and reporting.

Energy Probe submitted that it does not expect Pickering A to operate until 2021, and recommended a more proximate and more likely end of service life, but was not specific.

GEC argued that the DRP has not reached a stage where it is a firm decision that should trigger the accounting changes. At a minimum, GEC submitted that the revenue requirement should be adjusted upward to reflect scenario 4A. However, GEC did not accept that Pickering B Continued Operations project makes economic sense, and argued that scenario 2 should be applied for regulatory purposes at this time.

SEC argued that scenario 3 should be adopted, with impacts adjusted for income tax.

Board Findings

For the reasons set out Chapter 5 on DRP, the Board accepts 2051 as the Darlington station end of life for regulatory purposes.

Given the current uncertainty as to the success of the Pickering B Continued Operations project, the Board has some concerns about the assumption by OPG for accounting purposes that it can continue to operate Pickering A without Pickering B. However, changing the assumptions to align the end of life dates for these two stations has a relatively small revenue requirement impact which does not warrant the difficulties inherent in having separate accounting and regulatory accounts. There will be more information on the expected end of life for Pickering A and Pickering B in the next proceeding and a new end of life may well be adopted then.

9 CAPITAL STRUCTURE AND COST OF CAPITAL

This is the second cost of service application to set payment amounts for OPG's prescribed assets. Cost of capital was extensively reviewed in the previous proceeding. OPG's circumstances are different, in a number of respects, from those of other entities that the Board rate regulates. These are reflected in the different treatment that the Board approved for OPG in that proceeding.

Since the previous decision, the Board has conducted a consultation that reviewed cost of capital policies for all of the sectors rate-regulated by the Board, including OPG. The outcome of that process was the *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities* issued on December 11, 2009 (the "Cost of Capital Report"). OPG and many of the stakeholders participated in that consultation.

OPG has applied for payment amounts based on a deemed capital structure of 53% debt and 47% equity. This was the structure approved in the previous proceeding.

OPG proposed that the ROE for 2011 be set on the basis of the Board's policy (although it used 9.85% as a placeholder) and that the level for 2012 be set using the Board's policy, but that it be determined now based on Global Insight data because Consensus Forecasts only go out 12 months.

For long-term debt, OPG proposed to use the weighted average cost of actual and forecasted debt for actual debt capitalization, and the Board's deemed long-term debt rate for any incremental, unfunded long-term debt capitalization. For short-term debt, OPG used a methodology to forecast the costs of its two main sources of short-term financing, namely its commercial paper program and its accounts receivable securitization program. OPG's proposed cost of capital followed that approved in the previous payments case, EB-2007-0905.

The proposed test period capitalization and cost of capital are summarized in the following tables for each of the years in the test period.

Table 26: Capitalization and Cost of Capital - Calendar Year Ending December 31, 2011

Capitalization	Principal ($million)	Component (%)	Cost Rate (%)	Cost of Capital ($million)
Short-Term Debt	189.5	3.0%	2.64%	7.6
Existing/Planned Long-Term Debt	2,283.1	36.1%	5.53%	126.2
Other Long-Term Debt Provision	877.7	13.9%	5.87%	51.5
Total Debt	3,350.3	53.0%	5.53%	185.3
Common Equity	2,971.1	47.0%	9.85%	292.7
Rate Base Financed by Capital Structure	6,321.4	80.6%	7.56%	477.9
Adjustment for Lesser of UNL or ARC	1,523.3	19.4%	5.58%	85.0
Rate Base	7,844.7	100%	7.18%	562.9

Source: Exh. C1-1-1, Table 2

Table 27: Capitalization and Cost of Capital - Calendar Year Ending December 31, 2012

Capitalization	Principal ($million)	Component (%)	Cost Rate (%)	Cost of Capital ($million)
Short-Term Debt	189.5	2.9%	4.13%	10.4
Existing/Planned Long-Term Debt	2,502.8	38.8%	5.50%	137.6
Other Long-Term Debt Provision	725.2	11.2%	5.87%	42.6
Total Debt	3,417.5	53.0%	5.58%	190.6
Common Equity	3,030.6	47.0%	9.85%	298.5
Rate Base Financed by Capital Structure	6,448.1	81.2%	7.59%	489.1
Adjustment for Lesser of UNL or ARC	1,490.1	18.8%	5.58%	83.1
Rate Base	7,938.2	100%	7.21%	572.2

Source: Exh. C1-1-1, Table 1

The following issues were addressed in the proceeding:

- Technology-specific capital structures;
- Return on equity;
- Cost of short-term debt; and
- Cost of long-term debt.

Each issue is addressed in turn.

9.1 Technology-Specific Capital Structures

As noted above, OPG has used a deemed capital structure of 53% debt and 47% equity in its application. The deemed capital structure is applied to the rate base net of the Adjustment for the Lesser of Unfunded Nuclear Liabilities ("UNL") or Asset Retirement

Costs ("ARC"), which is applicable only to the nuclear business. OPG's proposal is consistent with the Board's decision in the previous proceeding.

In the previous proceeding, the Board set one overall capital structure for both regulated hydroelectric and nuclear businesses, but concluded that separate capital structures for the regulated hydroelectric business and the nuclear business was an approach worthy of further investigation at the next proceeding. This is the only issue related to capital structure examined during the proceeding.

In response to the Board's direction in the prior decision, OPG retained Ms. Kathleen McShane of Foster Associates Inc. to determine whether there was a basis on which to establish separate capital structures. Ms. McShane analysed five different quantitative methodologies and one non-quantitative method in her report. Ms McShane also appeared as a witness in the hearing. Ms. McShane concluded that none of the methodologies provided sufficiently robust information to serve as a basis for separate costs of capital and capital structure. Accordingly, OPG concluded that it was appropriate to continue to use a single capital structure for its prescribed facilities.

Pollution Probe filed a report prepared by Drs. Lawrence Kryzanowski and Gordon Roberts. They also appeared as witnesses. Their analysis is based on a heuristic methodology comparing the relative risk of electricity transmission and distribution-only utilities and an integrated (i.e. generation and transmission/distribution) utility versus solely hydroelectric and nuclear generation businesses. They concluded that the capital structure for the hydroelectric business should consist of 43% equity and the capital structure for the nuclear business should consist of 53% equity, subject to OPG's prescribed facilities retaining an equity thickness of 47% in aggregate, as determined in the previous proceeding.

GEC's witness, Mr. Paul Chernick, did not undertake an updated analysis specifically on the issue of technology-specific capital structures, but he did express the opinion that there was a difference in the business risks of hydroelectric and nuclear generation businesses. He testified that the Board could and should make a judgmental determination of the difference.

All consultants agreed that, as the ROE is to remain constant under the Board's Cost of Capital guidelines, the only way to reflect differences in business risk is by adjusting the equity thickness of one division relative to the other.

Pollution Probe maintained that there is no dispute that the nuclear division has a higher business risk than the hydroelectric division. Pollution Probe noted that the capital structure recommended by Drs. Kryzanowski and Roberts was consistent with credit metrics needed to obtain, on a "stand alone" basis, reasonable bond ratings in the "A" credit range. Pollution Probe commented that the methodologies used by Ms. McShane in her analysis are usually used to determine the rate of return, and not the capital structure.

Energy Probe submitted that the Board should deem a higher equity ratio for the nuclear business than the hydroelectric business, setting the nuclear business equity ratio at 50% and the regulated hydroelectric business equity ratio at 40%.

GEC submitted that setting a higher cost of capital for the nuclear business would be more accurate than applying the current combined value to both businesses. GEC submitted that OPG should develop project specific discount rates for large projects to capture business risk more fully in the analysis.

AMPCO, CME, CCC, PWU, SEC and VECC supported retaining a single capital structure for the regulated business. Among the reasons cited were the unnecessary complexity of maintaining two structures and the fact that OPG borrows as a company not by business unit. CCC also commented that the analysis conducted by Drs. Kryzanowski and Roberts was largely a qualitative approach.

Board staff argued that if the Board was inclined to approve technology-specific capital structures, then the Board should also apply the cost of debt on a technology-specific basis. Board staff noted that the nuclear liabilities are treated as a form of debt financing within the capital structure but are only incorporated, appropriately, into the rate base for OPG's regulated nuclear assets.

OPG argued that technology-specific capital structures add unnecessary complications to future applications. OPG noted that consumers do not buy power from particular producers, let alone based on generation type, and that the difference in equity ratios and resulting returns is small. OPG also argued that there is no compelling reason to accept the recommendations of Drs. Kryzanowski and Roberts. In OPG's view, the evidence did not extend the analysis beyond that provided in the previous proceeding and therefore the conclusion of the previous proceeding should be maintained.

If the Board is inclined to approve separate capital structures, OPG submitted that the only reasonable ratios would be 45% for the regulated hydroelectric business and 50% for nuclear. OPG also argued that Board staff is incorrect in concluding that cost of debt is specific to projects, noting that the cost of debt for the projects identified in the staff submission reflect OPG's corporate borrowing costs.

Board Findings

OPG has applied the same capital structure as was approved on a combined basis for its regulated hydroelectric and nuclear generation assets in the previous payments case. The Board finds that there is no evidence of any material change in OPG's business risk and that the deemed capital structure of 47% equity and 53% debt, after adjusting for the lesser of Unfunded Nuclear Liabilities or Asset Retirement Costs, remains appropriate.

The Board accepts that the business risks associated with the nuclear business are higher than those of the regulated hydroelectric business, and this is not contested by parties in this hearing. However, the Board finds that the evidence in this proceeding does not provide a sufficiently robust basis to set technology-specific costs of capital, by way of division-specific capital structures. In short, the Board finds an inadequate body of evidence to support a change from the conclusions reached by the Board in the previous proceeding.

The evidence of Drs. Kryzanowski and Roberts is a heuristic approach and is qualitative as much as quantitative in nature. Their evidence also largely employed the same techniques as contained in their evidence in the previous case. The difficulty for the Board is the dependence on qualitative assumptions and analysis. Their qualitative assessments of various forms of risk give rise to quantitative scorings that they then have translated into different capital structures corresponding to a cost of capital related to the risks of each business division and constrained by two conditions:

1) the weighted aggregate cost of capital for the two divisions should correspond with the 47% equity thickness set by the Board on an aggregate basis; and
2) the cost of capital and hence the deemed capital structure for the hydroelectric division should be commensurate with a business risk no less risky than that for electricity distributors and transmitters, for which the Board has deemed a 40% equity thickness.

As was discussed during oral cross-examination, these conditions restrict the allowable technology-specific capital structures to a very narrow band. The Board is concerned that different qualitative scorings might result in some different results from their analysis, even while adhering to the relative riskiness (in terms of ranking) of transmission and distribution utilities versus generation technologies. In other words, as was found in the previous case, the Board considers that the heuristic approach of Drs. Kryzanowski and Roberts is not robust enough to set technology-specific costs of capital and capital structures.

With respect to Ms. McShane's evidence, the Board acknowledges its more quantitative approach, but also acknowledges some of the concerns raised by parties. For the most part, the analytical approaches used by Ms. McShane are based on the CAPM model, and thus share the strengths and limitations. The CAPM is one of several techniques routinely used by this Board and other regulators in setting the Cost of Capital. However, as was acknowledged by OPG,[44] the CAPM is not used to set the capital structure, which must be derived indirectly. However, the Board considers that the paucity of comparator firms to be more telling in Ms. McShane's analysis not being able to derive a robust estimate of technology-specific capital structures.

There may thus be a lack of major hydroelectric and nuclear generators comparable to OPG's divisions and for which market data is available to apply the methods that Ms. McShane has used. It is not to say that there is not a real difference, but that the approaches put on the record in this proceeding, as in the previous case, are not sufficient to allow for robust estimates with sufficient precision to be derived, at least at this time.

The Board is also concerned that over time a further issue will arise in relation to the interaction between the individual equity ratios and the combined equity ratio. As the relative size of the hydroelectric and nuclear businesses changes (through major additions to rate base, for example) the issue will arise as to whether the overall ratio of 47% is to remain unchanged or whether the technology specific ratios are to remain unchanged. If the overall level of 47% is to remain unchanged, then this could result in ongoing variability in the technology specific levels, which may not be desirable. Likewise, if the technology specific ratios are to remain unchanged, it might result in changes to the overall ratio that are not warranted. The Board concludes that introducing this level of variability and complexity would not be appropriate.

[44] Exh. L-10-23 and Exh. L-6-7

The Board also accepts that implementing separate capital structures may not lead to any significant ratepayer benefits in the long term.

The primary argument put forward by those who support a separate capital structure is related to the assessment of large capital projects. The Board concludes that this difference in risk can and should be adequately accommodated in the direct valuation of the projects. OPG maintained that it already does so; other parties dispute this. This issue can be pursued further by the parties in subsequent proceedings.

Another argument advanced in favour of separate capital structures is greater transparency for consumers. The Board has some sympathy with this view, but has nonetheless concluded that the benefits from this greater transparency are not sufficient to warrant the complications involved with this approach based on the evidence advanced in this or the previous payments case.

9.2 Return on Equity

Two issues were raised in respect of the return on equity: whether the Board should adjust the ROE below the level established through the operation of the Board's policy, and how the ROE should be set for 2012.

9.2.1 Should the ROE be reduced?

OPG proposed that the ROE be determined according to the formula in the Cost of Capital Report, using data from *Consensus Forecasts*, the Bank of Canada and Bloomberg LLP three months in advance of the March 1, 2011 effective date for rates.

CME maintained that unregulated industries would forego full equity return on investment if external circumstances called for price constraint. CME argued that the Board is not required to award ROE at a specific level as this is not an objective or requirement in the Act, and could award a lower rate than applied for by OPG in order to protect consumers from rising electricity prices. CME pointed out that it would be inconsistent for the ROE to be fixed at a specific rate, when the Board, in some cases, can award a higher ROE, as, for example, contemplated by the *Report of the Board on The Regulatory Treatment of Infrastructure Investment in Connection with the Rate Regulated Activities of Distributors and Transmitters in Ontario*. Also, CME suggested

that, if the ROE is considered to be an absolute number, any over-earnings in a rate year would have to be returned to ratepayers in a subsequent year.

OPG argued that it is a legal requirement to permit a utility the opportunity to earn a fair return on its invested capital, and that the Cost of Capital Report applies to all utilities regulated by the Board. As noted elsewhere in this Decision, OPG also argued that it has no obligation to have regard for costs over which it has no control.

CME also argued that the Board has always looked to sources and actual costs of funds when considering cost of capital issues, and should therefore take into account that OPG's capital structure is financed by interest free government loans or grants, taxes or money the government borrows in the debt markets. CME's position was that the approved ROE only needs to exceed the government's cost of debt.

OPG argued that there is no basis to use its shareholder's cost of capital as a guide to setting ROE. OPG pointed out that if this principle were applied then it would have to be applied symmetrically and there is no precedent for this approach. Further, OPG argued that it is inconsistent with the "stand-alone" principle which the Board accepted in the previous proceeding. OPG also submitted that CME's proposition violated a basic principle of finance – that the cost of capital should reflect the riskiness of the entity or the project in which the funds are invested, not the source of the funds.

Board Findings

The Board accepts OPG's proposal to use the ROE determined on the basis of the Board's Cost of Capital Report. In the Cost of Capital Report, the Board determined that the Fair Return Standard ("FRS") is the legal basis upon which the cost of capital is determined, stating:

> The Board is of the view that the FRS frames the discretion of a regulator, by setting out three requirements that must be satisfied by the cost of capital determinations of the tribunal. Meeting the standard is not optional; it is a legal requirement. As set out by Enbridge in their final comments, the Supreme Court of Canada has "described this requirement that approved rates must produce a fair return as an 'absolute' obligation."[footnote omitted] Notwithstanding this mandatory obligation, the Board notes that the FRS is sufficiently broad that the regulator that

> applies it must still use informed judgment and apply its discretion in the determination of a rate regulated entity's cost of capital.[45]

In the Cost of Capital Report, the Board also stated:

> The final "product" of this process, of course, is a Board policy. This was not a hearing process, and it does not - indeed cannot - set rates. The Board's refreshed cost of capital policies will be considered through rate hearings for the individual utilities, at which it is possible that specific evidence may be proffered and tested before the Board. Board panels assigned to these cases will look to the report for guidance in how the cost of capital should be determined. Board panels considering individual rate applications, however, are not bound by the Board's policy, and where justified by specific circumstances, may choose not to apply the policy (or a part of the policy).[46]

While the Board agrees that there is flexibility to apply a different ROE in appropriate circumstances, there was no evidence of a compelling reason to do so in this case. As discussed in the Cost of Capital Report regarding the legal requirement for the FRS, the Board does not agree with CME's proposal that OPG should be afforded a lower ROE to mitigate impacts on ratepayers. Rate mitigation, if warranted, is not applied specifically to the Cost of Capital; doing so would violate the FRS.

The Cost of Capital Report contemplates that a departure from the policy will only be considered where there is specific evidence in the hearing that it would be inappropriate to apply the policy in the specific circumstances of the utility. The Board finds that there was no such credible evidence in this case.

The Board also agrees with OPG that the source of its financing is not relevant for these purposes and will not adjust the ROE to reflect its shareholder's cost of debt. This issue was also raised in the previous payments decision and similar arguments were raised and addressed at that time. The Board finds that there has been no change in the evidence or circumstances which would warrant a change in approach.

9.2.2 How should the ROE for 2011 and 2012 be set?

OPG used an ROE of 9.85% for purposes of its application, but proposed that the ROE for 2011 be set using data for the month three months prior to the effective date of the

[45] Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, EB-2009-0084, December 11, 2009, p. 13.
[46] *Ibid*, p. 18.

new payment amounts, as contemplated in the Cost of Capital Report. OPG proposed that the ROE for 2012 be set at the same time as the 2011 ROE but using data from Global Insight instead of the *Consensus Forecasts* used by the Board because the *Consensus Forecasts* data is only projected for 12 months.

Board staff argued that OPG's cost of capital parameters for 2011 should be set at the time this Decision is issued, but that the cost of capital parameters for 2012 should be updated prior to 2012. In support of this position, Board staff referred to recent Toronto Hydro-Electric Systems Limited ("THESL")[47] and Hydro One[48] cases, where updates of cost of capital parameters were implemented in the second year of multi-year applications.

SEC supported fixing the ROE now for the 24-month test period, citing simplicity and price stability, but expressed some reservations about forecasting markets two years out using the Global Insight forecast. SEC expressed concern about the adoption of a new data source without further review and concluded that ROE for 2011 and 2012 should be set at the same level, an approach that is consistent with that used under IRM. In the event this approach was not adopted by the Board, SEC supported Board staff's position. CME supported SEC's position.

OPG argued that the THESL and Hydro One cases should not be used as precedents because these utilities had already proposed to adjust their rates for the second year. OPG also took the position that SEC's comparison with IRM is inappropriate because OPG has no price escalation mechanism for its rates. With respect to SEC's concern about the Global Insight forecast, OPG noted that the Board had not expressed any concerns with the Global Insight forecast in the previous proceeding.

In the event that the Board directs the use of *Consensus Forecasts* data, OPG requested that a variance account be established to record the impacts of any differences arising from ROE approved in rates for 2012 and the 2012 ROE determined using September 2011 *Consensus Forecasts* data. OPG observed that this would be more efficient than updating the forecast and payment amounts for 2012, and would eliminate the need for the IESO to institute another change in the settlement system at the start of 2012.

[47] Decision with Reasons, EB-2009-0069, April 16, 2010.
[48] Decision with Reasons, EB-2009-0096, April 9, 2010.

Board Findings

The Board finds that the ROE for 2011 will be set using the data available for the three months prior to the effective date of the order, in accordance with the Board's Cost of Capital Report. The Board has calculated an ROE of 9.43% based on Bloomberg LLP, *Consensus Forecasts*, and Bank of Canada data for November 2010, which is three months in advance of March 1, 2011, and using the ROE methodology in Appendix B of the Cost of Capital Report. The detailed calculations to derive this ROE are contained in Appendix H of this Decision.

In the prior proceeding, the ROE was fixed at 8.57% for the entire test period spanning nearly two years. In part, this was a matter of timing – the decision in the previous payments case was issued on November 3, 2008, more than one third of the way through the test period. By that time there was knowledge of actual market conditions and returns and more current information for the remainder of the test period which justified approving one ROE for the entire test period.

The current application differs in that it has been filed and considered in advance of the proposed test period. OPG has proposed different treatment in setting different ROEs for each of the 2011 and 2012 test years. The Board considers it appropriate to set separate ROEs for each year of the test period. The issue is what data should be used for establishing the 2012 ROE.

The Board could adopt the same approach used in the THESL and Hydro One decisions which involves updating the ROE for 2012 using the data from *Consensus Forecasts,* Bank of Canada and Bloomberg LLP for the month 3 months prior to January 1, 2012 (i.e. September 2011) and the methodology in the Cost of Capital Report. The approach has the benefit of retaining all aspects of the ROE methodology and policy adopted by the Board, rather than adopting a new forecast method. However, it introduces procedural complications and it does necessitate the setting of new payment amounts for 2012. The Board finds that there is significant value, in terms of overall rate stability, in establishing one set of payment amounts in relation to the combined revenue requirement of the test period. In addition, if there were an update for the ROE for 2012, it would result in payment amount levels for 2012 which were derived from the 2012-specific ROE figure, but the blended test period revenue requirement impacts for all other components. The Board finds that a mechanistic update for one component of the revenue requirement, when the payment amounts in

all other respects are the result of a blended revenue requirement covering the entire test period, is not appropriate in the circumstances.

The Board concludes that it is reasonable to use the Global Insight forecast for purposes of setting the ROE for 2012. The Board finds this approach is consistent with the Board's overarching policy and represents the best balance between rate stability, procedural efficiency and accurate forecasting. OPG has indicated in its Reply Argument that the ROE for 2012 is 9.55%, based on the Global Insight forecast and the Board's methodology. OPG shall file the relevant documentation as part of its draft payment amounts order, consistent with the methodology adopted by the Board in its Cost of Capital Report, supporting the derivation of the ROE for 2012.

9.3 Cost of Short-Term Debt

OPG's short-term debt is comprised of a commercial paper program and an accounts payable securitization program. OPG's estimates of the short-term debt rates for each of 2011 and 2012 are derived from Global Insight data from December 2009. OPG's short-term debt approach is consistent with that approved in the previous proceeding.

Board staff submitted that while OPG has its own methodology for forecasting short-term debt rates, it should update the rates to reflect more current data, namely data for the month three months prior to the effective date of the new payment amounts, and again prior to January 1, 2012 for the 2012 test year. In staff's view, this approach would be consistent with the Cost of Capital Report and with ensuring that all cost of capital parameters are based concurrently on the most recent data available and practical for setting rates for the test period. Board staff further argued that the updated rates should be supported with documentation respecting the calculations and source data.

SEC submitted that the short-term debt rates for both 2011 and 2012 should be updated using December 2010 forecasts. CME submitted that the Board should be consistent in how it determines the costs of short-term and long-term debt for government owned utilities.

OPG responded that Board staff had ignored the fact that the Board's Cost of Capital Report approved OPG to use the same approach for short-term debt that it used in the previous case. OPG also argued that Board staff had ignored the fact that the method

approved in the previous case for setting short-term debt for OPG differs from the method used for electricity distributors. OPG prepared an Impact Statement prior to the oral hearing identifying items that exceed the $10 million materiality threshold and debt costs were not identified in the impact statement. OPG submitted that the short-term debt rate in the application is the same rate used for the business plan that underpins the application, and that it would be unfair for the Board to require it to selectively update the short-term debt costs for 2011.

Board Findings

The Board agrees with OPG that its approach to short-term debt rates is consistent with the previous decision, that it was accepted in the Cost of Capital Report, and that its forecast for the two test years is reasonable. The Board will not require OPG to update the short-term debt rates for either 2011 or 2012.

9.4 Cost of Long-Term Debt

OPG documented its actual and forecasted long-term debt for 2011 and 2012. OPG proposed that any unfunded portion of its long-term debt (the difference between the deemed long-term debt capitalization and actual or embedded debt) would attract the Board's deemed long-term debt rate based on data three months in advance of the effective date for the new prescribed payments. No parties opposed OPG's evidence with respect to its actual and forecasted long-term debt, but most parties opposed OPG's proposal for the cost of unfunded long-term debt.

Board staff argued that it is inappropriate for OPG to use the Board's deemed long-term debt rate as the cost for the unfunded portion of long-term debt. Board staff submitted that OPG's interpretation of the Board's Cost of Capital Report was inconsistent with the Board's policy and practice and that OPG's forecasted weighted average cost of existing and forecasted long-term debt should apply to the unfunded portion of long-term debt as well as to actual or embedded long-term debt.

SEC and VECC agreed with the Board staff submission, and argued that the Board should not adopt OPG's proposal because the deemed long-term debt rate is intended to be available only where there is no evidence of a utility's cost of long term debt.

OPG observed that Board staff relied on cases decided prior to the issuance of the Board's Cost of Capital Report, but noted that staff did not refer to the previous OPG

case where the Board decided that it was appropriate to use the "hedged cost of planned debt" to calculate the cost of OPG's notional long-term debt. Further, OPG observed that as new debt is issued, it will be issued at future debt rates. OPG submitted that it has an active long-term borrowing program and it is not necessary to rely on the cost of historical debt as a proxy for future debt.

Board Findings

The Board agrees with Board staff's submission that the Board's deemed long-term debt rate is only intended to apply where a utility has no actual long term debt (or where the debt is held by an affiliate). This is not the case for OPG, and therefore OPG's weighted average cost of existing and forecasted long-term debt will apply to the unfunded portion of long-term debt as well as to actual or forecasted long-term debt in each test year.

OPG has suggested that this approach is not appropriate because the weighted average cost does not represent an appropriate proxy for future debt. The notional long-term debt, however, is not intended as a proxy for future debt. Forecast future debt is already incorporated into the calculations, and there was little evidence to suggest that notional debt would be replaced with actual debt during the test period. The notional debt remains a balancing item and therefore the Board concludes that the appropriate cost rate is determined using the weighted average cost of debt.

10 DEFERRAL AND VARIANCE ACCOUNTS

10.1 Introduction

OPG has three deferral and variance accounts for its hydroelectric business and nine accounts for its nuclear business. There are three additional accounts common to both businesses. Certain of these accounts were authorized under O. Reg. 53/05. All of these existing accounts were established pursuant to decisions in the first payments proceeding (EB-2007-0905), the motion proceeding (EB-2009-0038) or the accounting order proceeding (EB-2009-0174). OPG's evidence is that entries to these accounts during 2008, 2009 and 2010 have been made in accordance with the methodologies established in the relevant decisions. Interest on the accounts has been applied in accordance with the rates prescribed by the Board from time to time.

OPG proposed to clear the actual audited December 31, 2010 balances through payment amount riders. In its reply submission, OPG agreed to file audited 2010 deferral and variance account balances at the earliest possible time for possible inclusion in this Decision. No party objected to this approach. The audited balances were filed on February 7, 2011 and are presented in the table below.

Table 28: Summary of Deferral & Variance Accounts Balances from 2007 to 2009 and 2010 Audited Balances Proposed for Recovery ($million)

Account	Year End Balance 2007 (1)	Year End Balance 2008 (1)	Year End Balance 2009 (1)	Year End Balance 2010 (2)
Regulated Hydroelectric:				
Hydroelectric Water Conditions Variance	$6.3	$(21.6)	$(55.3)	$(70)
Ancillary Services Net Revenue Variance – Hydroelectric	7.2	(2.4)	(16.0)	(9)
Income & Other Taxes Variance	0.0	(0.2)	(0.3)	(8)
Tax Loss Variance	0.0	20.2	47.1	78
Interim Period Shortfall (Rider D)	0.0	(0.3)	(2.2)	(2)
Over/Under Recovery Variance – (2010)	0.0	0.0	0.0	(8)
Total	**13.5**	**(4.2)**	**(26.6)**	**(19)**
Nuclear:				
Pickering A Return To Service Deferral	183.8	129.5	81.8	33
Nuclear Liability Deferral	130.5	132.3	86.2	39
Nuclear Development Variance	11.7	(21.7)	(55.6)	(111)
Transmission Outages and Restrictions Variance	1.8	1.4	0.7	0
Ancillary Services Net Revenue Variance – Nuclear	(1.8)	(1.9)	(0.6)	0
Capacity Refurbishment Variance	0.0	(5.7)	(0.3)	(8)
Nuclear Fuel Cost Variance	0.0	(1.4)	(15.7)	6
Bruce Lease Net Revenue Variance	0.0	256.6	324.5	250
Income and Other Tax Variance	0.0	(7.8)	(12.1)	(32)
Tax Loss Variance	0.0	105.9	247.2	414
Interim Period Shortfall (Rider B)	0.0	0.3	6.6	7
Over/Under Recovery Variance – Nuclear (Rider A&C)	0.0	0.6	10.7	21
Total	**326**	**588.1**	**673.4**	**619**
Grand Total	**$339.5**	**$583.9**	**$646.8**	**$600**

(1) Source: Exh. H1-1-1, Table 1 (updated October 8, 2010)
(2) Source: Audited account balances (per Schedule of Regulatory Balances as at December 31, 2010 and Independent Auditors' Report), as filed on February 7, 2011

OPG proposed to clear the balances of all accounts (except the Tax Loss Variance Account) with payment riders effective from March 1, 2011 to December 31, 2012. OPG proposed to amortize the balance in the Tax Loss Variance Account over a 46 month period from March 1, 2011 to December 31, 2014. Based on forecast account balances, filed on October 8, 2010, of $17.4 million credit for hydroelectric and $690.1 million debit for nuclear, the forecast test period riders would be a credit of $1.66/MWh for hydroelectric and a charge of $5.06/MWh for nuclear. These riders will change to reflect the audited 2010 balances as filed on February 7, 2011. The 2010 year end balances summarized in Table 28 above, are proposed for recovery in the test period, except the tax loss variance account balances, which are proposed for recovery over a 46 month period.

OPG requested the continuation of the following accounts:

- Ancillary Service Net Revenue Variance Account – Hydroelectric and Nuclear
- Income and Other Taxes Variance Account
- Tax Loss Variance Account
- Hydroelectric Water Conditions Variance Account
- Hydroelectric Deferral and Variance Over/Under Recovery Variance Account
- Nuclear Liability Deferral Account
- Nuclear Development Variance Account
- Capacity Refurbishment Variance Account
- Nuclear Fuel Cost Variance Account
- Bruce Lease Net Revenues Variance Account
- Nuclear Deferral and Variance Over/Under Recovery Variance Account

OPG requested that the following accounts continue only for entries for amortization and interest and that the accounts be closed once the balances are recovered:

- Interim Period Shortfall (Rider D) Variance Account
- Pickering A Return to Service Deferral Account
- Transmission Outages and Restrictions Variance Account
- Interim Period Shortfall (Rider B) Variance Account

10.2 Existing Hydroelectric Accounts

No submissions were filed on the hydroelectric specific accounts.

Board Findings

The audited December 31, 2010 balances in the hydroelectric accounts are approved for disposition as proposed by OPG. The Board also approves the continuation of the hydroelectric accounts as proposed by OPG.

10.3 Existing Common and Nuclear Accounts

Intervenors made submissions on the following accounts: Tax Loss Variance Account (which is common to hydroelectric and nuclear); Nuclear Liability Deferral Account;

Capacity Refurbishment Variance Account; Nuclear Fuel Cost Variance Account; and the Bruce Lease Net Revenues Variance Account.

10.3.1 Tax Loss Variance Account

The Tax Loss Variance Account was established by the Board in the motion proceeding EB-2009-0038. That proceeding was held to review the Board's previous payments decision, and in particular the Board's decision in the area of tax losses for the period that preceded regulation by the Board and rate increase mitigation. The motion decision stated "the clearance of this account will be reviewed in OPG's next payment application hearing when a future panel of the Board reviews the tax analysis ordered in the Payments Decision [EB-2007-0905]." In the current proceeding, OPG seeks recovery of the December 31, 2010 balance in the account over a 46 month period. The audited balance is $492 million: $78 million is allocated to the hydroelectric business and $414 million is allocated to the nuclear business.

The Tax Loss Variance Account and the history of the tax losses is a matter of considerable complexity. It is useful to review the history of this issue through the various proceedings.

In the previous payments proceeding, OPG recognized that the revenue requirement increase it was requesting was significant and would result in a 19% increase in payment amounts. OPG identified that the regulatory taxable income calculation for the years 2005-2007, the period during which the Province established the payment amounts and before the period in which the Board set the amounts, resulted in tax losses for those years. OPG calculated the regulatory tax losses at the end of 2007 to be $990.2 million in total. OPG proposed to accelerate the application of the available tax losses to reduce the test period revenue requirement in order to mitigate the increase in the payment amounts to 14.8%. Specifically, OPG proposed to exclude the 2008-2009 test period tax provision from the revenue requirement and to reduce the revenue requirement by a further $228 million.

In the payments decision, the Board stated that it was not convinced that there were any regulatory tax losses to be carried forward to 2008 and later years. The Board directed OPG to file better information on its forecast of test period income tax provision and a re-analysis of the prior period tax returns in its next application. The Board also required OPG to provide mitigation in an amount that was proportional to the originally

proposed mitigation amount (i.e. 22% of the revenue deficiency). The resulting mitigation was $168.7 million.

OPG filed a motion for a review and variance of the original decision related to these matters. The Board granted the motion and made the following decision:

> The Board varies the Payments Decision [EB-2007-0905] in a manner that links the revenue requirement reduction and regulatory tax losses, and orders the establishment of a tax loss variance account to record any variance between the tax loss mitigation amount which underpins the rate order for the test period and the tax loss amount resulting from the re-analysis of the prior period tax returns based on the Board's directions in the Payments Decision as to the re-calculation of those tax losses.[49]

In the current proceeding, OPG's evidence is that the Board's EB-2007-0905 decision reduced OPG's revenue requirement by $342 million, consisting of $168.7 million for the mitigation amount and $172.5 million for the elimination of the tax provision for 2008 and 2009. This amount was also identified during the motion proceeding. OPG described the determination of this amount as follows:

- The amount of mitigation included in the EB-2007-0905 decision (excluding tax) was $168.7 million.
- The benchmark tax expense for the previous test period was $66 million.
- The provision for taxes and gross up is $106.5 million.
- The total is $341.2 million

In accordance with the Board's decision in EB-2007-0905, OPG recalculated its regulatory tax losses for the period April 1, 2005 to March 31, 2008 to be $188.5 million. OPG described the adjustments it made to the original estimate of $990.2 million to arrive at $188.5 million as follows:

- The Board's decision on the Pickering A Return to Service Deferral Account ("PARTS") required OPG to provide tax benefits to coincide with the timing of the recovery of the costs. OPG determined that this would reduce the tax loss by $147 million.
- The previous decision stated that any calculation of tax loss "in respect of the prescribed facilities should exclude revenues and expenses related to the Bruce

[49] Decision and Order, EB-2009-0038, May 11, 2009, p. 15.

lease." OPG determined that the tax loss should be reduced by $390 million as a result.

- The Board noted in the previous decision that the operating loss in 2007 was borne completely by OPG's shareholder, which reduced the tax loss by $234.2 million.
- OPG determined that a further $37 million reduction was required due to an update of information for 2007 and that a $6.5 million addition was required due to allocation of adjustments to the period prior to regulation.

OPG engaged Ernst & Young to apply specified procedures guided by section 9100 of the CICA Handbook to reconcile information in OPG's corporate tax returns to the determination of prior period tax losses for the prescribed facilities for 2005, 2006 and 2007. Ernst & Young was able to tie the numbers on the schedules back to the source documents with no exceptions.

From this amount of $188.5 million OPG deducted the $77.6 million in taxable income for the period January 1, 2008 through March 31, 2008. This left $110.9 million in remaining net cumulative losses, or a revenue requirement amount of $50.3 million.

The difference between the revenue requirement reduction ($342 million) and the remaining tax loss ($50.3 million), being $290.9 million, was booked to the account for the period April 1, 2008 through December 31, 2009. OPG forecast the amount for 2010 to be $195 million, being an annualized grossed-up amount of the $342 million revenue requirement reduction during the original 21 month test period. To these amounts OPG also applied interest at the Board prescribed levels.

SEC provided in its argument a detailed alternative estimate of the appropriate amounts to be considered in respect of this issue. SEC submitted that there should be no regulatory tax liability for the period 2008 to 2012 because of timing differences which SEC has determined are in the order of $1,660.4 million. In SEC's view, these amounts, which are tax deductions taken by OPG prior to April 1, 2008, should be available to ratepayers. SEC estimated that an amount between $450 million and $500 million would remain available for deduction in 2013 and beyond.

The principle that SEC relied on in its submission is "benefits follow costs" which SEC describes as meaning "if the ratepayers bear a cost in their rates, then any tax impacts

that flow from that cost accrue to the ratepayers as well."[50] In particular, SEC is concerned with the application of this principle with respect to tax related timing differences. "Timing difference" refers to government tax policy which in SEC's words "allows taxpayers to front load their tax deductions, and thus save tax dollars, as a way of providing economic stimulus and incenting long term spending."[51] SEC asserted that the general pattern is one of tax savings in the early years and tax costs in later years and in general the regulatory system matches this by using a taxes payable approach to setting rates.

In OPG's case, however, SEC argued that the balance is disrupted because OPG became regulated part way through the tax benefit period, meaning that the shareholder will have gained from the tax benefits in the pre-regulation period and ratepayers will bear the balancing tax costs in the regulation period. In SEC's view, the appropriate approach is to re-examine the relevant periods to ensure ratepayers receive the benefits of these timing differences.

SEC reviewed the evidence and determined that OPG had $1,660.4 million of timing differences (including amounts related to Bruce) in the three years prior to April 1, 2008 which should be available to ratepayers. The largest component (over $1.2 billion) is related to nuclear waste and decommissioning costs. These amounts include impacts related to Bruce, because in SEC's view, when the Board decided that GAAP should be used to calculate the net Bruce lease revenue, the Board was "not intending to say that Bruce should be an exception to the "benefits follow costs" principle related to tax calculations."[52]

SEC further argued that the tax losses prior to April 1, 2005 should also be considered for potential availability to ratepayers and recommended that the Board direct OPG to prepare a detailed review of the losses at the next proceeding.

OPG opposed SEC's analysis on three principal grounds. First, OPG argued that SEC's analysis consists of untested evidence. In OPG's view, SEC's approach is a form of opinion/expert evidence and no authority has been provided for the positions taken in relation to the accounting and regulatory principles related to tax/accounting timing differences.

[50] SEC Argument, para. 10.2.9.
[51] SEC Argument, para. 10.2.16.
[52] SEC Argument, para. 10.2.63.

Second, OPG argued that SEC's analysis violates Board approved regulatory principles and does not comply with accepted tax and accounting practices. In OPG's view, tax loss carry forward is a concept which is recognized in the *Income Tax Act* and OEB regulated tax calculations but timing differences carried forward have no basis in accounting. OPG further argued that SEC's generalization regarding the pattern associated with timing differences is incorrect and pointed, for example, to testimony that deductions for nuclear liabilities are only available when actual cash expenditures are made. OPG also submitted that whereas it applies the deductions against earnings before tax and carries forward any resulting loss, SEC ignores earnings before tax and does not apply the deduction in the period for which it applies.

Third, OPG maintained that SEC's analysis is based on misinterpreted facts and faulty assumptions. OPG provided an analysis of why, in its view, SEC's analysis is flawed. For example, OPG explained that its treatment of the PARTS amounts, unlike SEC's proposal, is based on the Board's direction in the first payments decision which required that the timing of PARTS recovery match the timing of providing the associated tax cost or benefit to ratepayers. OPG also pointed to the incomplete nature of SEC's analysis and the lack of identification of adjustments to earnings that were additions. OPG further argued that SEC had incorrectly applied the "benefits follow cost" principle, and OPG has appropriately excluded Bruce lease revenues and costs from its tax loss determination. OPG also argued that SEC has ignored the provisions of O. Reg. 53/05 sections 6(2)5 and 6(2)6 which require the Board to accept the revenue requirement impact of accounting and tax policy prior to the effective date of the Board's first order.

OPG further argued that there is no basis to review the period before April 1, 2005 and therefore SEC's proposal that related evidence be provided at the next proceeding should be rejected.

CME supported SEC's submissions but also presented another approach related to the mitigation amount in relation to the original proceeding. CME pointed out that OPG's evidence in the original proceeding was that a 19% increase was excessive and needed to be reduced in order to bring the increase to about 14.8% to be reasonable. CME estimated this amount to be $360 million. OPG responded that the motion decision varied the original decision in a way that links the mitigation with the regulatory tax losses. OPG argued that CME has mischaracterized the nature of OPG's original proposal as being focused on mitigation.

VECC and CME argued that no amount associated with 2010 should be recoverable. In VECC's view, "The decision establishing the test period Tax Loss Variance Account never contemplates, either explicitly or implicitly, the operation of a similar account beyond 2009."[53] VECC asserted that it is clear in the decision that the variance to be tracked was limited to the test period. VECC went on to submit that if the Board rejects this argument, then at a minimum the $195 million for 2010 should be reduced by $26.2 million to reflect the reduced tax amounts related to nuclear liabilities in 2010. VECC also submitted that had OPG proposed the tracking of $195 million in the accounting order proceeding, EB-2009-0174, intervenors may have made submissions and the Board may have considered different relief. This position was supported by CME and SEC.

OPG replied that the accounting order proceeding was about the mechanics of booking entries in accounts in 2010 and that there was no need to make a request for this matter for the tax loss variance account. Further, OPG stated that it was not necessary to seek extended terms for any of the deferral and variance accounts:

> …payment amounts are established based on a test period, but they remain in place until changed by the OEB. Similarly, unless the OEB explicitly states otherwise, variance and deferral accounts established in relation to those payment amounts also continue until changed by the OEB.[54]

OPG also rejected VECC's proposal that the 2010 balance be reduced by $26.2 million related to the tax impacts of changes in nuclear liabilities. OPG maintained that the account does not cover changes in 2010 actual amounts resulting from the Darlington Refurbishment project:

> The revenue requirement impact pertaining to income taxes should be treated the same as the revenue requirement impact associated with non-tax factors. They are simply not relevant to the determination of the test period revenue requirement.[55]

CCC supported SEC's submission, but argued that the Board should defer consideration of the tax loss variance account to a separate proceeding, and that an independent expert should report on the issue. OPG objected to this suggestion

[53] VECC Argument, para. 119.
[54] Reply Argument, p. 196.
[55] Reply Argument, p. 156.

referring to direction in the EB-2007-0905 and EB-2009-0038 decisions which stated that the matter would be addressed in this payment amounts application.

Board Findings

The Board approves recovery of the balance in the Tax Loss Variance Account in accordance with OPG's proposal to recover the balances over a 46 month period. However, the riders that will be given effect by this Decision and subsequent payment order will be effective until December 31, 2012.

CCC argued that the matter should be deferred to another proceeding. The Board does not agree. It was made clear in the motion proceeding and the prior payments decision that the issues were to be resolved in this proceeding. It would only be appropriate to defer consideration of the issue if there were insufficient evidence on the record. That is not the case here.

SEC argued that the appropriate application of the "benefits follow costs" principle, which was articulated by the Board in the original payments decision, would see the inclusion of the impact of timing differences in the calculation of the tax amounts. The result of SEC's approach would be a proposed credit for ratepayers resulting from net timing differences of $1,660.4 million. Of this $1,660.4 million, SEC identified $1,052.4 million for the prescribed facilities and $608.0 million for Bruce.

OPG has pointed to significant deficiencies in SEC's analysis, and the Board finds that OPG's criticisms have merit. For example, the Board agrees that OPG's treatment of the amounts related to the PARTS account is consistent with the Board's prior decision which required that the timing of the tax effect be aligned with the recovery of the cost. The Board also accepts OPG's evidence that the effect of timing differences is not always as SEC has posited, and in particular not in the case of asset retirement costs. The Board also concurs with OPG's position that it is clear the Board intended for Bruce revenues and costs to be excluded from the analysis. For these reasons, the Board finds SEC's calculations and estimations to be unpersuasive.

With respect to amounts in the account for 2010, the Board finds that there is no basis in the motion decision for the proposition that this account was only effective during the prior test period. The section of the decision that has been quoted by the parties is as follows:

> The Board varies the Payments Decision [EB-2007-0905] in a manner that links the revenue requirement reduction and regulatory tax losses, and orders the establishment of a tax loss variance account to record any variance between the tax loss mitigation amount which underpins the rate order for the test period and the tax loss amount resulting from the re-analysis of the prior period tax returns based on the Board's directions in the Payments Decision as to the re-calculation of those tax losses.[56]

The parties opposed to any recovery for 2010 point to the phrase "the tax loss mitigation amount which underpins the rate order for the test period" as the basis for their position that the account was only established for the duration of the test period. The Board does not agree that the decision is appropriately interpreted in that way for two reasons. First, the plain reading of the phrase indicates that the words "for the test period" are meant to describe the relevant rate order. Second, the Board indicated that the account was to be cleared, and the relevant issues addressed, in the next proceeding. While parties might have expected that the next proceeding would follow directly from the prior test period, having found that the original decision was in error and that the payment amounts included amounts which would need to be adjusted at a future time, it does not follow that the Board would have intended for the account to have a fixed duration for only the test period. In essence, the account was put in place to correct an error in the original decision and as long as those original payments were in place the error continued to exist.

The Board also rejects CME's argument that the account should be adjusted to reflect a quantification of the appropriate level of mitigation. The scope of the account was clearly set out in the motion decision and there is no suggestion that any amounts in addition to the description of the appropriate variance are to be contemplated for purposes of mitigation.

VECC argued that at a minimum the Board should reduce the 2010 balance by $26.2 million to reflect the reduced tax amounts related to nuclear liabilities in 2010 (as compared to the original test period). The Board does not agree. VECC is proposing an adjustment to the original mitigation amount ($341.2 million) to reflect one component of actual results, but the motion decision defined and fixed the original mitigation amount as "the tax loss mitigation amount which underpins the rate order for the test period." This wording effectively fixes the amount at the level which underpinned the original payment order and contemplates no adjustment for actual

[56] Decision and Order, EB-2009-0038, p. 15.

results in relation to regulatory taxes paid during the period. No adjustments have been made to reflect actual regulatory taxes for the original 2008 and 2009 test period; it would likewise be inappropriate to adjust the 2010 amount.

10.3.2 Nuclear Liability Deferral Account

OPG incurs costs associated with decommissioning its nuclear facilities and managing used fuel and low and intermediate level waste. These costs are recognized as expenses over the life of the nuclear stations and are included in payment amounts because they are part of the cost of operating the nuclear stations.

The Nuclear Liability Deferral Account (Transition) was established in 2007 in accordance with section 5.1(1) of O. Reg. 53/05 to capture the revenue requirement impact of any change in OPG's nuclear decommissioning liability arising from an approved reference plan under the Ontario Nuclear Funds Agreement ("ONFA"). Section 5.1(2) of the O. Reg. 53/05 provides that simple interest be applied on the monthly opening balance at an annual rate of 6%. That account was in effect until the Board's first order.

The previous proceeding established the current Nuclear Liability Deferral Account effective April 1, 2008 pursuant to section 5.2(1) of O. Reg. 53/05. The Board directed OPG to record the return on rate base using the average accretion rate on OPG's nuclear liabilities of 5.6% for the test period.

SEC observed that the balance in the account, as noted in the previous decision, was $130.5 million and that no changes to the reference plan under ONFA have taken place. SEC stated that the opening balance of the account on April 1, 2008, as noted in the current application, was $163.9 million with an amount of $31.3 million recorded in the first quarter of 2008.

OPG replied that the difference between nuclear liability costs embedded in payment amounts approved by the province for the period up to March 31, 2008 and those costs arising from the reference plan under ONFA are captured by the Nuclear Liability Deferral Account. OPG referred to the 2008 OPG Audited Financial Statement and the first quarter 2008 Financial Statements. Both noted an increase to the nuclear liability deferral account of $37 million of which $6 million is interest.

Board Findings

The Board is satisfied with OPG's explanation for the entries in the Nuclear Liability Deferral Account (Transition) for the first quarter of 2008 in relation to section 5.1(1) of O. Reg. 53/05.

10.3.3 Bruce Lease Net Revenues Variance Account

The Bruce Lease Net Revenues Variance Account was established to capture the difference between (i) the forecast costs and revenues related to Bruce that are factored into the test period payment amounts for Pickering and Darlington and (ii) OPG's actual revenues and costs in respect of Bruce based on Generally Accepted Accounting Principles. The cost impact of any changes in nuclear liabilities related to Bruce would also be recorded in this account. The balance in this account as of December 31, 2010 was $250 million.

Board staff noted that OPG proposed to recover the large balances in other accounts over an extended period to mitigate the impact on rates. In particular, OPG proposed to recover the balance in the Tax Loss Variance Account over 46 months, and in the previous proceeding the Board approved a 45 month recovery period for the Pickering A Return to Service Deferral Account (although OPG had proposed a 12 year recovery period). Accordingly, Board staff submitted that a 46 month recovery period was appropriate for the Bruce Lease Net Revenues Variance Account. CCC supported this proposal.

OPG replied that Board staff did not provide a target level for rate increases and that staff did not acknowledge the impact of deferring recovery on OPG. OPG also noted that extending the recovery period would push rate pressure into the next test period. OPG further argued that the Pickering A Return to Service account was not an appropriate example to follow because OPG's original proposal was for recovery over 12 years, with carrying costs based on the weighted average cost of capital, to match the underlying asset life. OPG rejected the view that accounts with large balances should be recovered over a longer term and argued that the extended recovery for the tax loss variance account provides sufficient rate mitigation.

SEC observed that the balance in the account is largely due to the loss on the segregated funds in 2008 and submitted that this was a one-time event that is not likely to recur. In SEC's view, the proposed recovery of almost $300 million during the test period for a one-time event is not appropriate and not in accordance with the original

intent of the account. Like Board staff, SEC proposed that a 46 month period was appropriate. OPG replied that the Board's decision in the previous proceeding was clear on the need for the account and the account entries. OPG submitted that it is unnecessary to consider whether the balance is due to unusual one-time events or the original intention of the account.

Board Findings

The Board acknowledges that the balance in the account is significant and that an extended recovery period could provide additional rate mitigation. However, the Board concludes that further mitigation is not required in the context of this application. The proposed disposition period is approved.

10.3.4 Capacity Refurbishment Variance Account

The operation of this account in respect of the Pickering B Continued Operations project has already been addressed in Chapter 4.

The only other issue raised by the parties in respect of this account relates to the cost of Pickering B refurbishment studies. AMPCO submitted that the Board should disallow $4.9 million related to Pickering B refurbishment studies because in AMPCO's view it is clear that it was never worthwhile to study the refurbishment of Pickering B. OPG replied that the evaluation of Pickering B refurbishment was undertaken pursuant to a shareholder directive and that OPG's proposed spending was reviewed and approved in the previous proceeding and concluded that the Board should reject AMPCO's submission.

Board Findings

The Board will not remove the costs associated with the Pickering B refurbishment studies. These activities were prudently undertaken and the costs are therefore eligible for recovery under O. Reg. 53/05 and the account.

10.3.5 All Other Existing Common and Nuclear Accounts

The audited December 31, 2010 balances in the other common and nuclear accounts are approved for disposition as proposed by OPG. The Board also approves the continuation of the existing common and nuclear accounts as proposed by OPG.

10.4 New Accounts Proposed by OPG

10.4.1 IESO Non-energy Charges Variance Account

As a load customer, OPG pays IESO non-energy charges. OPG maintained that these charges are difficult to forecast, principally because of the Global Adjustment Mechanism. OPG noted that variances in the IESO non-energy charges have been material and have occurred in both directions in recent years. OPG also noted that effective January 1, 2011, O. Reg. 398/10 will change the method used to collect the Global Adjustment Mechanism, potentially compounding forecasting difficulties due to the uncertain impact on the behaviour of large volume consumers.

Board staff submitted that it would be reasonable for the Board to approve the account as the charges are largely pass-through and there are considerable challenges in forecasting them. If the account was approved, however, staff questioned whether OPG would have an incentive to implement energy efficiency measures and suggested that OPG should be required to demonstrate efforts to reduce consumption from the IESO grid. CCC was not opposed to OPG's account request and supported Board staff's suggestion that OPG be required to demonstrate efforts to reduce energy consumption prior to clearing the account. OPG responded that it was prepared to provide evidence that it is making efforts to reduce consumption which are economic and practical.

As an alternative, Board staff observed that the variance for years in which there were no vacuum building outages hovered around $10 million. Accordingly, Board staff submitted that it would not be unreasonable to deny the account on the basis that the amounts were not material. OPG responded that a variance of $10 million was material and highlighted its view that the level and volatility of the Global Adjustment Mechanism was expected to increase over time and that therefore the variance would increase substantially.

SEC agreed that IESO non-energy charges are material and can cause dramatic changes in the delivered cost of electricity. However, in SEC's view, the fact that the electricity bill may be unpredictable is a normal business risk, and part of the risks for which a cost of capital is allowed. SEC cautioned that approval of the account could encourage other utilities to seek broader protection against normal business risks. SEC observed that, if anything, OPG has less right than other ratepayers to have this

variance account as 25% of the Global Adjustment Mechanism for the 12 month period ending August 2010 was paid to OPG.

OPG disagreed that these charges are a normal business risk arguing:

> While these charges may have been part of normal business risks several years ago, and may again return to some level of predictability in the future, in more recent years and for the test period, owing to volatile components of these charges, most notably the Global Adjustment, these charges are well outside normal business risks.[57]

Board Findings

Board staff and CCC have characterized these charges as a "pass-through". However, these charges are only a pass-through if the Board accords that treatment to them. The concept of pass-through is appropriate, for example, in the case of the treatment of natural gas supply costs. Natural gas distribution utilities purchase natural gas and transportation services which are then sold to their customers without a mark-up. In these circumstances it is appropriate that the utility be kept whole, in other words that the supply costs are "passed through" to customers, through the use of a variance account. That is not the circumstance here. Electricity charges are a business expense for OPG, and while it may be difficult to forecast these charges and there are varying expectations for the rate of growth of these charges, they are certainly a business risk faced by all participants in the electricity sector in Ontario. Since this is a risk faced by all market participants, the Board concludes that it is a normal business risk. The request for the account is denied.

10.4.2 Pension and Other Post Employment Benefits Cost Variance Account

The Board has not approved the establishment of this account. Details are contained in Chapter 6.

10.5 New Accounts Proposed by Other Parties

A number of accounts were proposed by OPG or intervenors through argument. Each proposal for an account was made in the context of a specific issue in the hearing (for example, production forecast, other revenue, cost of capital, etc.). For purposes of this

[57] Reply Argument, p. 206.

Decision, the Board has addressed each proposal for an account in the context of the broader issue. The only new accounts to be established are for Surplus Baseload Generation (Hydroelectric) and the Hydroelectric Incentive Mechanism.

11 DESIGN AND DETERMINATION OF PAYMENT AMOUNTS

11.1 Design of Payment Amounts

OPG proposed no changes to the previously approved payment amounts design. Currently, the hydroelectric and nuclear payment amounts are each 100% variable amounts based on forecast production. OPG proposed that the payment amount for the regulated hydroelectric facilities be determined by dividing the hydroelectric revenue requirement by the forecast hydroelectric production. Based on OPG's filing, the payment amount would be $37.38/MWh. Similarly, OPG proposed that the payment amount for the prescribed nuclear facilities be determined by dividing the nuclear revenue requirement by the forecast nuclear production. Based on OPG's filing, the payment amount would be $55.34/MWh. No issues were raised with respect to this methodology and the Board finds that the previously approved methodology should continue. The precise levels of the payment amounts will be determined on the basis of the Board approved revenue requirements and production forecasts.

OPG proposed the use of separate payment riders for hydroelectric and nuclear for purposes of clearing the respective deferral and variance account balances. The precise levels of the payment riders will be determined on the basis of the Board approved deferral and variance account balances and production forecasts. The recovery of the deferral and variance account balances is dealt with in Chapter 10.

OPG also proposed to maintain the same Hydroelectric Incentive Mechanism. A number of parties opposed OPG's proposal. This issue is addressed below.

11.2 Hydroelectric Incentive Mechanism

In the previous proceeding, OPG proposed and the Board approved a hydroelectric incentive mechanism ("HIM"). Under the HIM, OPG receives the regulated payment amount for the actual average hourly net energy production over the month. For production above the monthly average hourly volume in a given hour, OPG receives market prices. For production below the monthly average hourly volume in a given hour, the amount payable to OPG at the regulated payment amount is reduced by the production shortfall multiplied by the market price. The purpose of the HIM is to incent OPG to move production from periods of low value to periods of higher value, based on

market signals. The incremental revenues (above the regulated payment amounts) are retained by the company and not returned to ratepayers.

While there is some peaking capability at all the regulated hydroelectric facilities, the majority of peaking activity occurs at the Sir Adam Beck complex, and specifically the pump generating station ("PGS"). OPG can move substantial quantities of energy from off-peak to on-peak periods. The cost of pumping in the off-peak period is compared with the forecast value of the additional generation in the next on-peak period, and vice versa.

OPG estimated that between December 2008 and December 2009, the HIM reduced average market prices by $1.14/MWh, and in OPG's view this demonstrates the value of moving energy from off-peak to on-peak. The forecast HIM revenue for 2009 was $12.0 million, but the actual was $23.2 million. The forecast HIM revenue for 2010 was $8.0 million, but the year-to-date actual at the end of August 2010 was $11.0 million. For the test period, OPG forecasted HIM revenues of $13.3 million for 2011 and $16.3 million for 2012. OPG expects market price spreads to decline relative to 2009.

Board staff, AMPCO, CME, CCC, Energy Probe and VECC made submissions on the HIM. In general, parties submitted that the incentive was excessive and that a sharing mechanism was appropriate. Board staff proposed a graduated sharing mechanism combined with a thorough review of the HIM forecast methodology. CCC proposed that ratepayers receive 75% of the HIM revenues, with 25% for OPG. CME took the same position.

Board staff also submitted that the sharing mechanism would reduce the relative value of the HIM for OPG in comparison to pumping water in response to SBG conditions, thereby increasing the likelihood that OPG will pump water during SBG rather than spill it.

VECC submitted that the HIM should be discontinued in its entirety because, in VECC's view, OPG confirmed during the oral hearing that it could operate exactly as it does now in the absence of the HIM. In VECC's view there is no basis for providing an additional financial incentive related to the operation of these regulated assets; all proceeds should flow to the ratepayers. In the alternative, VECC supported a 75%/25% sharing between ratepayers and the shareholder (or 50%/50% sharing if 90% of the forecast level is built into the forecast revenue).

OPG responded that any sharing mechanism will tend to reduce the frequency and use of the PGS resulting in less time shifting of generation because the benefits to OPG will be reduced without reducing the risks. Further, OPG stated that while parties may view a sharing mechanism as beneficial, in OPG's view it comes at a cost of reduced market benefit for consumers.

Board staff submitted that due to the large proportion of energy supplied through contract pricing, the market price is largely irrelevant in establishing electricity costs for consumers. CCC also took the view that the claimed reduction in market prices was not supported by the evidence. OPG replied that it has no control over the Global Adjustment Mechanism and bases its decisions on market price spreads and maintained that "any decrease in HOEP does not necessarily result in a one-for-one increase in Global Adjustment payments."[58] OPG further asserted "any drop in HOEP will still result in savings to consumers."[59]

Energy Probe did not support a sharing mechanism. Energy Probe argued that the HIM formula is flawed, and noted that it had identified this situation in the previous proceeding and that the evidence in this proceeding confirmed that the flaw was significant. In Energy Probe's submission, the current formula subtracts 100% of energy used to pump from the calculation of hourly volume, thus reducing the hourly volume threshold which determines the base amount in the HIM formula, but when OPG generates from the PGS it recovers some of the energy used for pumping. Energy Probe submitted that this recovered energy is 44% of the energy consumed to pump. Therefore, the adjustment to hourly volume from PGS consumption should be 56% in Energy Probe's view, not 100%. Essentially, OPG is actually consuming 56% of the energy used to pump water while storing and recovering the remaining 44% when it releases the water from the PGS. Energy Probe concluded that the Board should eliminate the circularity or "second payment" in the present HIM formula, by adding a correction to the calculation of MWavg.

AMPCO also proposed that the formula be modified by adjusting the hourly average rate (for the month) to remove the effect of PGS's turn-around energy losses.

OPG acknowledged that pumping lowers the hourly volume, but went on to submit:

[58] Reply Argument, p. 29.
[59] Reply Argument, p. 29.

> However, to artificially increase the net energy used to determine the hourly volume by ignoring the energy used for pumping creates a fictional situation where the energy threshold is set higher than what is achieved in any given month.[60]

OPG maintained that if the threshold was set artificially high, the benefits to consumers and OPG would be reduced.

Board Findings

The purpose of the HIM is to provide OPG with incentives to operate the PGS in a way which benefits consumers. OPG maintained that it was appropriate to demonstrate the success of the HIM on the basis of market price spreads. However, market prices are only one component of the price paid by consumers for electricity generation, and even though OPG may have no control over the Global Adjustment Mechanism, the ultimate value for consumers from the HIM must be assessed in light of the actual generation costs borne by consumers, not just one component of those costs.

The evidence does not support a conclusion that the current structure of the HIM is providing significant benefits for consumers. It is clear that a substantial portion of the market is now under contract and that fluctuations in the market price are largely offset by variations in the Global Adjustment Mechanism. In relation to this issue, OPG argued that this effect is not one-for-one, but in relation to the issue of a variance account for IESO non-energy charges, OPG argued that lower market prices do result in corresponding increases in the Global Adjustment Mechanism. The Board finds that the net benefits to consumers are likely substantially less than estimated by OPG on the basis of market price differentials alone.

The Board also sees an important relationship between the HIM and SBG. In this Decision, the Board has decided that OPG will be compensated for SBG. Under these circumstances, the Board concludes that while there may be consumer benefits from OPG shifting production between low market value and high market value periods, this shifting is of greatest benefit to ratepayers if in the first instance it mitigates the level of SBG – when ratepayers will otherwise pay the regulated payment amount for generation lost through spill related to SBG.

The Board will not make the adjustment proposed by Energy Probe. While the Board agrees with Energy Probe's concern regarding the circularity of the formula and the

[60] Reply Argument, p. 30.

resulting addition to the incentive payment, the Board's conclusion is that it is more appropriate to re-visit the structure of the HIM in its entirety in the next proceeding rather than attempt to modify it in incremental ways in this proceeding. Instead, the Board will adjust the rate of incentive both directly and through the operation of the SBG variance account.

The Board finds that it is appropriate to reduce the level of incentive for OPG. The incentive is paid for directly by consumers; it is not the result of incremental business from other customers. This incentive is a premium paid by ratepayers to OPG so OPG will operate in a way which is of greater benefit to ratepayers. The Board has already found that OPG has not adequately substantiated its claim of consumer benefits, and therefore, until a more robust structure is established, the Board will require that 50% of the proceeds of the HIM be returned to customers and will incorporate HIM revenues into the revenue requirement as a revenue offset.

The Board will also adjust the HIM through its review of the SBG deferral account. OPG has indicated that it will use the PGS to mitigate SBG if the price spreads warrant it. However, for production that is lost due to SBG, ratepayers will compensate OPG directly for the full volume at the regulated payment level. The Board therefore expects OPG to use the PGS to the maximum extent possible to mitigate this additional direct cost on ratepayers. When assessing the circumstances which give rise to lost production due to SBG, the Board will examine the use of PGS and OPG will have to fully justify any instances in which the PGS is not used. If the Board finds that OPG could have, or should have, used the PGS to mitigate SBG, the Board will adjust the balance in the SBG account accordingly. The Board expects that this approach will have the effect of moderating the total level of incentive available to OPG, but concludes that it is a better structure to ensure direct benefits to ratepayers.

In recognition of the potential interaction between SBG and HIM, the Board will only incorporate a portion of the HIM revenue forecast into the revenue requirement: $5 million for 2011 and $7 million for 2012. The Board also directs OPG to establish a variance account to track all additional HIM net revenues above this forecast provision. Additional net revenues up to $5 million in 2011 and $7 million in 2012 will all be retained by OPG, and any additional net revenues beyond those levels will be shared equally between OPG and ratepayers.

The Board also directs OPG to re-address the HIM structure in its next application. Specifically, the Board expects OPG to provide a more comprehensive analysis of the benefits of the HIM for ratepayers, the interaction between the mechanism and SBG, and an assessment of potential alternative approaches in light of expected future conditions in the contracted and traded market. If OPG is unable to perform this analysis through lack of information, then the company should seek to have the analysis performed by an agency with access to the necessary information. It may well be appropriate for OPG to request that the IESO examine the issue and provide suitable evidence or for OPG to work with the IESO to prepare the evidence.

12 REPORTING AND RECORD KEEPING REQUIREMENTS

OPG currently has no obligation to file financial and operating reports with the Board on a regular basis. The Board established Electricity Reporting and Record Keeping Requirements ("RRR") in 2002. Distribution utilities file financial and operating information on a quarterly and annual basis in accordance with the RRR and as a condition of their licence.

At issue in this proceeding is what reporting requirements should be established for OPG and whether a RRR should be established for the company. Board staff proposed a list of potential RRR documents during the proceeding. OPG confirmed that it could provide many of the documents.

Board staff and SEC submitted that OPG should begin filing RRR in 2011. OPG did not object to the establishment of RRR, but submitted that a separate process would be appropriate in order to establish requirements which recognize cost considerations and are minimally intrusive. In OPG's view, its RRR should be tailored to its regulatory environment and the potential IRM regime. OPG referred to the Board's approach to RRR for natural gas utilities as an example of the process to follow.

In terms of financial information, OPG confirmed that it can provide information that is publicly available in its Management's Discussion & Analysis ("MD&A") and unaudited interim (quarterly) consolidated financial statements as well as its annual MD&A and audited consolidated financial statements, and when available its annual report. These documents reflect the financial performance of OPG as a whole.

OPG objected to providing audited financial statements for the prescribed facilities on an annual basis. The decision in the previous proceeding directed OPG to file audited financial statements for the prescribed facilities, and OPG provided those financial statements for 2008 and 2009 with the current application. OPG claimed that the statements are time consuming and cost $400,000 to produce. Further, OPG maintained that any comparison with Hydro One's capability to file separate financial statements for the distribution and transmission businesses is inappropriate as OPG's financial and monitoring systems were designed before identification of the prescribed facilities. OPG has one system for all accounts and one general ledger. OPG also observed that the statements were not referred to during the current proceeding.

Board staff submitted that OPG should prepare a report for the Board detailing the costs to develop the capability to produce audited annual financial statements for the prescribed facilities.

SEC argued that OPG should be required to establish appropriate systems that would lead to the efficient preparation of audited financial statements for the prescribed facilities. SEC noted that the prescribed facilities are the biggest part of OPG's business and that OPG receives substantial benefit from being regulated and that being regulated entails providing reliable, independent information. SEC suggested that OPG should take the opportunity to revise its systems in parallel with system changes for IFRS. SEC also argued that the reason evidence is not the subject of cross-examination is because its meaning is clear, and that the audited financial statements for the prescribed facilities assisted parties in understanding OPG's business.

OPG proposed the filing of an annual regulatory return as an alternative to audited financial statements for the prescribed facilities, although OPG noted specific requirements have not been defined. OPG was not persuaded by SEC's position that lack of reference to the audited financial statements is not an indication of limited value, and noted that documents that are important to the outcome of a hearing are typically discussed. OPG argued that there was no discernable value to be gained from Board staff's suggestion to prepare a report detailing the costs to develop the capability to produce the financial statements.

Board Findings

Regular reporting of financial and operating data is an important component of the overall regulatory structure. The data allows the Board to monitor the performance of utilities in years when they are not before the Board and provides consistent data over time for purposes of various analyses. Ongoing reporting will be particularly important as OPG migrates to an IRM regime.

The Board does not believe a separate consultation is required in order to establish initial reporting requirements for OPG. There is sufficient information before the Board at this time to determine appropriate reporting requirements for 2011 and 2012. The issue of reporting requirements can also be addressed again in the next proceeding. The Board concludes that determining the reporting requirements in the context of a payment amounts proceeding will be more efficient and less costly than undertaking a

separate consultation process. The Board therefore finds that the following reports shall be filed, beginning in 2011:

- Unaudited balances of deferral and variance accounts within 60 days after calendar quarter end;
- The MD&A and financial statements as filed with the OSC within 60 days for the first three quarters, and within 120 days for December year-end statements as long as the OSC requires these documents to be filed;
- Nuclear unit capability factors and hydroelectric availability for the regulated facilities within 60 days for the first three quarters and within 120 days for December year end as reported in OPG's quarterly and annual MD&A;
- FTE information, similar to the presentation in Exhibit F4, tab 3, schedule 1, chart 1 by April 30th;
- Capital in-service additions and construction work in progress by April 30th; and
- An analysis of the actual annual regulatory return, after tax on rate base, both dollars and percentages, for the regulated business and a comparison with the regulatory return included in the payment amounts by June 30th of each year. It would be similar to what is set out in Exhibit C1, tab 1, schedule 1, table 7 for the historical period.

The Board may consider additional or modified reporting requirements for OPG when the company brings forward its incentive regulation mechanism proposal. As part of that application, OPG should propose the suite of RRR that might be applicable for its incentive plan period.

The Board finds that it is appropriate to continue to require OPG to provide annual audited financial statements for the prescribed facilities. OPG has stated that the current segment disclosure in its general purpose audited financial statements is in accordance with Canadian Generally Accepted Accounting Principles, and cannot be changed, since the segmented disclosure is consistent with OPG's management reporting structure. Given that more than 50% of OPG's business is regulated, the Board concludes that the financial statements should reflect this reality. There is no evidence that the regulatory framework for OPG, whereby a significant portion of its business is regulated by the Board, will be changed such that the Board is no longer the regulator. It may be that some investment will be required to provide audited financial statements for the regulated business, but given the size of OPG's regulated business and its significance in the overall Ontario electricity sector, and the expectation of

ongoing regulation by the Board, the Board concludes that it is appropriate to continue to require that audited statements for the regulated business be prepared. The Board notes that audited statements for the regulated business were ordered in the prior decision, for reasons related to improved assessment of the revenue requirement, and there was no indication at that time that it would be a one-time requirement. There has been no change in circumstances and no new evidence that would lead the Board to conclude that a change in approach is appropriate. It will be up to OPG to determine how to most efficiently meet this ongoing requirement.

13 METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

The Board prepared a report in 2006 establishing the methodology to be used for setting payment amounts for OPG. The report, *A Regulatory Methodology for Setting Payment Amounts for the Prescribed Generation Assets of Ontario Power Generation Inc.*, EB-2006-0064, issued on November 30, 2006, stated that, "The Board will implement an incentive regulation formula when it is satisfied that the base payment provides a robust starting point for that formula."

The previous payment amounts proceeding (EB-2007-0905) was the first proceeding for OPG, and was considered under traditional cost of service regulation. While the current application is only the second cost of service application for OPG's prescribed facilities, both this application and the first one cover an approximately five-year period from 2008 to 2012.

Incentive regulation is an alternative to regular annual cost of service regulation and is generally comprised of a more formulaic or mechanistic approach to adjust revenues or rates for inflation while incentivizing productivity improvements. The process is also intended to avoid lengthy and costly annual hearings under cost of service approaches. The typical approach – and the one that the Board employs for both electricity and natural gas distribution – is that rates are initially set through a cost of service application, after which rates are adjusted annually through the incentive regulation mechanism. After a number of years, the rates, underlying costs and the incentive regulation plan are reviewed and, as necessary, reset. The Board first adopted incentive regulation (also known as performance-based regulation or PBR) for the electricity distribution sector with the 2000 Distribution Rate Handbook. Incentive regulation has been adopted for both electricity and natural gas distribution utilities.

OPG did not address the issue of incentive regulation in its original evidence. However, the Board decided that it would be appropriate to consider the issue in the proceeding. There were two components to this issue:

- When would it be appropriate for the Board to establish incentive regulation, or other form of alternative rate regulation, for setting payment amounts?

- What processes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, that would be applied in a future test period?

There was no pre-filed evidence on this matter. The record was completed through responses to interrogatories. There was also discussion of this issue in the technical conference and during the oral hearing.

OPG proposed, in response to an interrogatory, that following the conclusion of the current proceeding, the company would file an application setting out its proposal for incentive regulation. The proposal would be tested in a hearing and OPG would incorporate the results of that decision into its next cost of service application, which would then set base rates for incentive regulation. PWU supported OPG's proposal for development and consideration of incentive regulation, but expressed some reservations about whether incentive regulation is appropriate for OPG for the foreseeable future in light of the development of the long-term energy plan.

CCC was also not convinced that incentive regulation is necessarily appropriate for OPG, but concluded that there may be merit in having some elements of OPG's revenue requirement subject to incentives. CCC suggested that the Board hold a workshop to carefully consider whether incentive regulation could work for OPG.

SEC noted the complexity of OPG's operations and the recent changes in corporate culture and concluded that OPG is not ready for incentive regulation. SEC further submitted that the earliest incentive regulation should be considered is 2014 or 2015.

Board staff submitted that the development of incentive regulation is time and resource intensive and that it would be unrealistic to expect full development of a plan in 2011. Board staff held that the process to develop incentive regulation for OPG's prescribed assets would benefit from stakeholder input early in the process. Board staff observed that a total factor productivity study has not yet been commissioned; external experts have not been retained, and there appear to be no known incentive regulation regimes for utilities which would be analogous to OPG's regulated hydroelectric and nuclear generation businesses. Board staff also suggested that there could be separate incentive regulation plans for the regulated hydroelectric business and the regulated nuclear business because of the different operating characteristics of each.

Board staff provided some options for implementation of incentive regulation. One option would be to have OPG file an application for both IRM and implementation of rates for 2013. OPG argued that the option is impractical because it would not align with OPG's business planning cycle and that the costs would increase due to the resource requirement to respond to directions from the decision and undertake new studies. Another Board staff option would be to file a cost of service application for 2013 and in parallel file an incentive regulation application. In reply, OPG stated that the resource requirement for two applications would be extensive and it did not see how a one-year test period would be in ratepayers' interests.

OPG submitted that a third cost of service application is required to provide a robust starting point for incentive regulation. In its reply argument OPG proposed to file its IRM proposal as part of the cost of service application for 2013-2014; if the IRM proposal was adopted it could take effect in 2015. Alternatively, OPG stated that it could file an IRM proposal in 2013 after the conclusion of the next cost of service application.

Board Findings

The Board notes that its findings on this issue do not impact on the payment amounts arising from this Decision. However, the Board considers it important to give direction to OPG and other stakeholders regarding the future of incentive regulation as a means for setting payments for OPG's prescribed assets.

The Board remains convinced that an incentive regulation mechanism for setting payment amounts will be beneficial in the long-term. As noted in the Natural Gas Forum Report:

> The Board believes that a multi-year incentive regulation (IR) plan can be developed that will meet its criteria for an effective ratemaking framework: sustainable gains in efficiency, appropriate quality of service and an attractive investment environment. A properly designed plan will ensure downward pressure on rates by encouraging new levels of efficiency in Ontario's gas utilities – to the benefit of customers and shareholders. By implementing a multi-year IR framework, the Board also intends to provide the regulatory stability needed for investment in Ontario. The Board will establish the key parameters that will underpin the IR framework to ensure that its criteria are met and that all stakeholders have the same expectations of the plan.[61]

[61] Natural Gas Regulation in Ontario: A Renewed Policy Framework, Report on the Ontario Energy Board Natural Gas Forum, (RP-2004-0213), March 30, 2005, p. 22.

The Board is of the view that the benefits of incentive regulation identified in the Natural Gas Forum Report would also apply to OPG, given a suitable design.

The Board concurs with Board staff's submission that adequate time and effort is necessary to develop a suitable plan. OPG itself has acknowledged that the timeline that it first proposed is "aggressive". OPG has acknowledged that the company has not undertaken or commissioned any significant work on incentive regulation at this time.

The Board is not aware of IR plans applicable to generation-only utilities that might help in the development of a plan for OPG. While the Board and the industry have extensive experience with incentive regulation generally, it is not a matter of simply transferring a plan from natural gas or electricity distribution. Aspects of OPG's generation businesses must be suitably studied and accommodated in a plan. For example, development of a suitable X-factor will, in all likelihood, require a productivity study unique to OPG. Such efforts will require considerable time and resources.

The Board finds that, given the current situation, it is not practical to implement incentive regulation in time for implementation for payments for 2013. The Board therefore expects OPG to file another cost of service application for the 2013 and 2014 years.

However, the Board concludes that incentive regulation beginning in 2015 should be considered. To facilitate this, the Board will commence work in 2011 to lay out the scope of the required IRM and productivity studies to be filed by OPG. This review may include options and preferences on the general type(s) of incentive regulation mechanisms which may be suitable for setting payment amounts for OPG's regulated facilities. This preliminary process to consider incentive regulation mechanisms in the context of OPG's unique circumstances will allow for input from OPG and all other interested stakeholders.

The outcome of this review will serve as a starting point for OPG's subsequent application for an IRM regime which would commence in 2015. It is expected that the outcome of this review will be available no later than the first quarter of 2012.

Based on this preliminary review, and as a further step in the development of an incentive regulation mechanism, the Board expects OPG to provide a proposed work plan and status report for an independent productivity study as part of its 2013 and 2014

cost of service application, which would be expected in early 2012. OPG's plan would be examined during the proceeding.

Finally, the Board expects OPG to file an application for incentive regulation to be in effect starting in 2015. It is expected that such an application should be filed no later than the fourth quarter of 2013, and would be subject to a hearing in 2014. This would provide time for implementation on January 1, 2015.

The Board believes that this framework and timeline will allow for proper development of an incentive regulation plan while respecting the time and resource commitments necessary for OPG, the Board and stakeholders, and other regulatory activities.

In addition to the preliminary review work that the Board intends to undertake in 2011, the Board also expects OPG to engage stakeholders in meaningful discussions about the proposed incentive regulation mechanism in advance of the actual IRM regime filing.

14 IMPLEMENTATION AND COST AWARDS

14.1 Implementation

OPG proposed that its new payment amounts be made effective March 1, 2011.

On February 17, 2011, the Board issued an interim order making the current payment amounts interim effective March 1, 2011.

The new payment amounts will be made effective March 1, 2011. The Board understands that the IESO can implement this effective date through its billing processes without the necessity for a shortfall payment amounts rider to cover the period between March 1 and the date of the final payment amounts order.

The Board directs OPG to file with the Board, and copy to all intervenors, a draft payment amounts order which will include the final revenue requirement and payment amounts for the regulated hydroelectric and nuclear facilities, and reflect the findings made by the Board in this Decision. OPG should also include supporting schedules and a clear explanation of all calculations and assumptions used in deriving the payment amounts and the payment riders.

OPG is directed to provide a full description of each deferral and variance account as part of the draft payment amounts order.

OPG is directed to file the draft payment amounts order by March 21, 2011. Board staff and intervenors shall respond to OPG's draft payment order by March 28, 2011. OPG shall respond to any comments by Board staff and intervenors by April 4, 2011.

14.2 Cost Awards

A number of intervenors were deemed eligible for cost awards in this proceeding: Association of Major Power Consumers in Ontario, Canadian Manufacturers & Exporters, Consumers Council of Canada, Energy Probe Research Foundation, Green Energy Coalition, Pollution Probe, School Energy Coalition and Vulnerable Energy Consumers Coalition.

A cost awards decision will be issued after the steps set out below are completed.

1. Intervenors eligible for cost awards shall file with the Board and forward to OPG their respective cost claims by April 8, 2011.
2. OPG shall file with the Board and forward to the relevant intervenors any objections to the costs claimed, including any objections to cost claims filed prior to the issuance of this Decision, by April 15, 2011.
3. Intervenors whose costs have been objected to, may file with the Board and forward to OPG any response to the objection by April 21, 2011.

OPG shall pay the Board's costs of and incidental to this proceeding upon receipt of the Board's invoice.

DATED at Toronto, March 10, 2011

ONTARIO ENERGY BOARD

Original signed by

_____
Cynthia Chaplin
Presiding Member

Original signed by

_____
Marika Hare
Member

Original signed by

_____
Cathy Spoel
Member

APPENDIX A

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

PROCEDURAL DETAILS
INCLUDING LISTS OF PARTIES AND WITNESSES

PROCEDURAL DETAILS INCLUDING LISTS OF PARTIES AND WITNESSES

THE PROCEEDING

OPG filed its application for new payment amounts on May 26, 2010. On June 4, 2010, the Board issued a Notice of Application and Oral Hearing which was published in accordance with the Board's direction.

The Board issued Procedural Order No.1 on June 29, 2010, which provided a draft issues list and made provision for an issues conference and submissions on issues. The procedural order made provision for submissions on OPG's request for confidential treatment of certain tax information, and sections of business plans and business case summaries. The procedural order also set out a schedule for the proceeding.

The key milestones in the proceeding are listed below:

- The final issues list was issued along with Procedural Order No. 3 on July 21, 2010.
- Interrogatories were filed by Board staff on July 22, 2010 and by intervenors on July 29, 2010. The majority of responses were filed on August 12, 2010.
- A technical conference was held on August 26, 2010.
- Parties filed evidence on August 31, 2010.
- Interrogatories on evidence were filed on September 7, 2010 and responses were filed on September 14, 2010.
- A settlement conference was held on September 14, 2010, however no settlement was achieved.
- Motions from the Consumers Council of Canada and Canadian Manufacturers & Exports were heard on September 30, 2010.
- The oral hearing took place on 16 days during the period October 4, 2010 to November 26, 2010.
- OPG filed its argument in chief on November 19, 2010.
- Board staff filed its submission on November 30, 2010 and intervenors filed their submissions on December 6 and 7, 2010.
- OPG's reply argument was filed on December 21, 2010.
- An interim order declaring payment amounts interim effective March 1, 2011 was issued on February 17, 2011.

Thirteen procedural orders were issued during the course of the proceeding, some dealing with the schedule of the proceeding, but many dealing with matters of confidentiality, including submissions and decisions on requests for confidential treatment of documents, and submissions and decisions on breaches of confidentiality.

PARTICIPANTS

Below is a list of participants and their representatives that were active either at the oral hearing or at another stage of the proceeding.

Ontario Power Generation Inc.	Charles Keizer Crawford Smith Carlton Mathias Andrew Barrett Barbara Reuber
Board Counsel and Staff	Michael Millar Violet Binette Ben Baksh Richard Battista Russell Chute Chris Cincar Keith Ritchie Duncan Skinner
Association of Major Power Consumers in Ontario	David Crocker Andrew Lord Tom Adams Shelley Grice
Canadian Manufacturers & Exporters	Peter Thompson Vince DeRose Jack Hughes
Consumers Council of Canada	Robert Warren Julie Girvan
Energy Probe Research Foundation	Peter Faye David MacIntosh Norman Rubin Lawrence Schwartz
Green Energy Coalition	David Poch

Pollution Probe Foundation	Basil Alexander Jack Gibbons
Power Workers' Union	Richard Stephenson Alfredo Bertolotti Judy Kwik
School Energy Coalition	Jay Shepherd Mark Garner
The Society of Energy Professionals	Jo-Anne Pickel Mike Belmore Stanley Pui
Vulnerable Energy Consumers Coalition	Michael Buonaguro James Wightman

In addition to the above, the Association of Power Producers of Ontario, Hydro One Networks Inc. and the Ontario Power Authority were registered intervenors in this proceeding. The Independent Electricity System Operator and the Ministry of Energy were registered observers in this proceeding.

WITNESSES

The following OPG employees appeared as witnesses.

Joan Frain	Manager, Water Policy and Planning, Business Services and Water Resources Division
Mario Mazza	Director, Business Support and Regulatory Affairs, Hydro Business Unit
David Peterson	Manager of Market Monitoring
Mark Shea	Asset and Technical Services Manager, Ottawa/St. Lawrence Plant Group
Randy Leavitt	Vice President, Nuclear Finance
Pierre Tremblay	Senior Vice President, Nuclear Programs and Training
Mark Elliott	Senior Vice President of Inspection and Maintenance Services

John Mauti	Director, Nuclear Reporting
Paul Pasquet	Senior Vice President, Pickering B
Michael Allen	Director, Nuclear Programs
Carla Carmichael	Director, Business Planning and Performance Reporting, Nuclear Finance
James Woodcroft	Manager, Outage Programs
Mark Arnone	Vice President, Refurbishment Execution
Fred Dermarkar	Director, Engineering Services
Jamie Lawrie	Director, Investment Management
Nathan Reeve	Vice President, Financial Services
Dietmar Reiner	Senior Vice President, Nuclear Refurbishment
Gary Rose	Director of Planning and Control
Laurie Swami	Vice President, Nuclear Regulatory Programs and Director of Licensing and Environment, Darlington New Nuclear Project
Lorraine Irvine	Vice President, Human Resources Projects
Jong Kim	Chief Technology Officer, Business Services and Information Technology
Tom Staines	Director of Finance – Corporate Functions, Finance
John Lee	Assistant Treasurer
Randy Pugh	Director, Ontario Regulatory Affairs, Regulatory Accounting and Finance
David Bell	Manager, Corporate Accounting
David Halperin	Director, Financial and Business Planning, Corporate Finance
Robin Heard	Vice President, Finance and Chief Controller

Andrew Barrett	Vice President, Regulatory Affairs and Corporate Strategy
Alex Kogan	Manager, Regulatory Finance

OPG also called the following expert witness: John Sequeira of ScottMadden Inc., Kathleen McShane of Foster Associates Inc. and Ralph Luciani of Charles River Associates.

The intervenors called the following expert witnesses:

- Lawrence Kryzanowski of Concordia University and Gordon Roberts of York University appearing for Pollution Probe
- Paul Chernick of Resource Insight Inc. appearing for GEC
- Bruce Sharp of Agent Energy Advisors Inc., whose evidence was entered by written affidavit, for CME

APPENDIX B

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

APPROVALS SOUGHT BY OPG IN EB-2010-0008

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Exhibit A1
Tab 2
Schedule 2
Page 1 of 3

APPROVALS

In this Application, OPG is seeking the following specific approvals:

- The approval of a revenue requirement of $1,435.7M for the regulated hydroelectric facilities and a revenue requirement of $5,473.9M for the nuclear facilities for the period of January 1, 2011 through December 31, 2012 (the "test period") as set out in Ex. I1-T1-S1.

- The approval of a rate base of $3,803.4M and $3,787.4M for the regulated hydroelectric facilities for the years 2011 and 2012, respectively and $4,041.3M and $4,150.8M for the nuclear facilities for the years 2011 and 2012, respectively, as summarized in Ex. B1-T1-S1.

- The inclusion of construction work in progress ("CWIP") amounts for the Darlington Refurbishment Project of $125.5M in 2011 and $306.0M in 2012 in the rate base for the nuclear facilities and recovery of the associated cost of capital as presented in Ex. D2-T2-S2.

- Approval of a production forecast of 38.4 TWh for the test period for the regulated hydroelectric facilities and 98.9 TWh for the test period for the nuclear facilities. The production forecast is presented in Exhibit E.

- Approval of a deemed capital structure of 53 per cent debt and 47 per cent equity and a combined rate of return on rate base of 7.18 per cent and 7.21 per cent for 2011 and 2012, respectively, including a rate of return on equity ("ROE") forecast of 9.85 per cent, as presented in Ex. C1-T1-S1.

- Approval of a payment amount for the regulated hydroelectric facilities, effective March 1, 2011 of $37.38/MWh for the average hourly net energy production (MWh) from the regulated facilities in any given month (the "hourly volume") for each hour of that month.

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Exhibit A1
Tab 2
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Page 2 of 3

Production over the hourly volume will receive the market price from the Independent Electricity System Operator ("IESO")-administered energy market. Where production from the regulated hydroelectric facilities is less than the hourly volume, OPG's revenues will be adjusted by the difference between the hourly volume and the actual net energy production at the market price from the IESO-administered market. The payment amount for the regulated hydroelectric facilities is set out in Ex. I1-T2-S1.

- Approval of a payment amount for the nuclear facilities, effective March 1, 2011 of $55.34/MWh.

- Approval for recovery of the audited December 31, 2010 variance and deferral account balances for the regulated hydroelectric and nuclear facilities as described in Ex. H1-T1-S2 and disposition, beginning March 1, 2011, at a rate derived as described in Ex. H1-T2-S1.

- Approval to establish, re-establish or continue variance and deferral accounts as follows:
  - A variance account to record the deviation from forecast revenues associated with differences in regulated hydroelectric electricity production due to differences between forecast and actual water conditions.
  - A variance account to record the deviation from forecast net revenues for ancillary services from the regulated hydroelectric facilities and the nuclear facilities.
  - A variance account to record the deviation from forecast capital and non-capital costs and firm financial commitments associated with work to increase the output of, refurbish or add operating capacity to a regulated facility.
  - A variance account to record the deviation from forecast costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities.
  - A variance account to record the deviation between actual and forecast nuclear fuel costs.
  - A deferral account to record non-capital costs associated with the planned return-to-service of units at the Pickering A Generating Station.

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Tab 2
Schedule 2
Page 3 of 3

- A deferral account to record the revenue requirement impact of any change in the nuclear decommissioning liability resulting from an approved reference plan as defined in the Ontario Nuclear Funds Agreement.
- A variance account to capture the tax impact of changes in tax rates, rules and assessments.
- A variance account to record the variance between the tax loss mitigation amount which underpins the EB-2007-0905 Payment Amounts Order and the tax loss amount resulting from the re-analysis of the prior period tax returns based on the OEB's directions in EB-2007-0905 Decision with Reasons as to the re-calculation of those tax losses.
- A variance account to capture differences between forecast and actual costs and revenues related to the lease of the Bruce nuclear facilities.
- A variance account to record the difference between forecast and actual IESO non-energy charges incurred by the regulated hydroelectric and nuclear facilities.
- A variance account to record the difference between forecast and actual pension and other post-employment benefit costs and associated tax effects related to the regulated hydroelectric and nuclear facilities.
- Variance accounts to record the over/under recovery amounts for the hydroelectric variance and deferral accounts and nuclear variance and deferral accounts, respectively.

Evidence supporting the continuation of existing variance and deferral accounts and the creation of new ones is provided in Ex. H1-T3-S1.

- An order from the OEB declaring OPG's current payment amounts interim as of March 1, 2011, if the order or orders approving the payment amounts are not implemented by March 1, 2011.

APPENDIX C

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

DECISION ON MOTIONS, OCTOBER 4, 2010

DECISION ON CCC AND CME MOTIONS

Transcript: Oral Hearing, Volume 1, October 4, 2010, page 113

The Board sat on Thursday, September 30th, to hear motions by CCC and CME. Both motions sought the production of materials presented to the OPG board of directors in the period between April 1, 2010 and May 26, 2010.

The Board has decided not to order production of the materials sought in the CME and CCC motions. In the Board's view, these materials are not relevant to the determination of the issues before the Board in this proceeding. The Board will make its decision on the application and supporting materials filed by the applicant and the evidence of intervenors, all of which is subject to cross-examination.

This evidence goes to the financial and operational impacts of the application and of the alternatives which have been considered.

The material which has been sought through the motions includes the communication between OPG's management and its board of directors, seeking approval to file the application, delegated authority to deal with the proceeding, and the analysis of "likely prospects for success." This material does not form part of the application and does not enhance nor detract from the merits of the application.

The evidence is that no changes to the business plans and budgets which underpin the application were sought or made as a result of the board of directors' meeting. These plans and

budgets have been filed.

Intervenors can explore, through the witness, whether alternatives to the application should have been considered, and the impacts of OPG's choices. None of this relies on what management presented to the board of directors.

Having found that the materials are not relevant and need not be produced, the question of privilege will not be addressed.

That concludes the Board's decision, and subject to any questions, we can continue with the cross-examination.

APPENDIX D

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

SECTION 78.1 OF THE *ONTARIO ENERGY BOARD ACT, 1998*, S.O.1998, C.5 (SCHEDULE B)

Excerpt: Section 78.1 of the *Ontario Energy Board Act*, *1998*, S.O.1998, c.15 (Schedule B).

Payments to prescribed generator

78.1 (1) The IESO shall make payments to a generator prescribed by the regulations, or to the OPA on behalf of a generator prescribed by the regulations, with respect to output that is generated by a unit at a generation facility prescribed by the regulations. 2004, c. 23, Sched. B, s. 15.

Payment amount

(2) Each payment referred to in subsection (1) shall be the amount determined,

(a) in accordance with the regulations to the extent the payment relates to a period that is on or after the day this section comes into force and before the later of,

(i) the day prescribed for the purposes of this subsection, and

(ii) the effective date of the Board's first order in respect of the generator; and

(b) in accordance with the order of the Board then in effect to the extent the payment relates to a period that is on or after the later of,

(i) the day prescribed for the purposes of this subsection, and

(ii) the effective date of the Board's first order under this section in respect of the generator. 2004, c. 23, Sched. B, s. 15.

OPA may act as settlement agent

(3) The OPA may act as a settlement agent to settle amounts payable to a generator under this section. 2004, c. 23, Sched. B, s. 15.

Board orders

(4) The Board shall make an order under this section in accordance with the rules prescribed by the regulations and may include in the order conditions, classifications or practices, including rules respecting the calculation of the amount of the payment. 2004, c. 23, Sched. B, s. 15.

Fixing other prices

(5) The Board may fix such other payment amounts as it finds to be just and reasonable,

(a) on an application for an order under this section, if the Board is not satisfied that the amount applied for is just and reasonable; or

(b) at any other time, if the Board is not satisfied that the current payment amount is just and reasonable. 2004, c. 23, Sched. B, s. 15.

Burden of proof

(6) Subject to subsection (7), the burden of proof is on the applicant in an application made under this section. 2004, c. 23, Sched. B, s. 15.

Order

(7) If the Board on its own motion or at the request of the Minister commences a proceeding to determine whether an amount that the Board may approve or fix under this section is just and reasonable,

(a) the burden of establishing that the amount is just and reasonable is on the generator; and

(b) the Board shall make an order approving or fixing an amount that is just and reasonable. 2004, c. 23, Sched. B, s. 15.

Application

(8) Subsections (4), (5) and (7) apply only on and after the day prescribed by the regulations for the purposes of subsection (2). 2004, c. 23, Sched. B, s. 15.

APPENDIX E

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

ONTARIO REGULATION 53/05

Ontario Energy Board Act, 1998
Loi de 1998 sur la Commission de l'énergie de l'Ontario

ONTARIO REGULATION 53/05
PAYMENTS UNDER SECTION 78.1 OF THE ACT

Consolidation Period: From February 19, 2008 to the e-Laws currency date.

Last amendment: O. Reg. 27/08.

This Regulation is made in English only.

Definition

0.1 In this Regulation,

"approved reference plan" means a reference plan, as defined in the Ontario Nuclear Funds Agreement, that has been approved by Her Majesty the Queen in right of Ontario in accordance with that agreement;

"nuclear decommissioning liability" means the liability of Ontario Power Generation Inc. for decommissioning its nuclear generation facilities and the management of its nuclear waste and used fuel;

"Ontario Nuclear Funds Agreement" means the agreement entered into as of April 1, 1999 by Her Majesty the Queen in right of Ontario, Ontario Power Generation Inc. and certain subsidiaries of Ontario Power Generation Inc., including any amendments to the agreement. O. Reg. 23/07, s. 1.

Prescribed generator

1. Ontario Power Generation Inc. is prescribed as a generator for the purposes of section 78.1 of the Act. O. Reg. 53/05, s. 1.

Prescribed generation facilities

2. The following generation facilities of Ontario Power Generation Inc. are prescribed for the purposes of section 78.1 of the Act:

1. The following hydroelectric generating stations located in The Regional Municipality of Niagara:
   i. Sir Adam Beck I.
   ii. Sir Adam Beck II.
   iii. Sir Adam Beck Pump Generating Station.
   iv. De Cew Falls I.
   v. De Cew Falls II.
2. The R. H. Saunders hydroelectric generating station on the St. Lawrence River.
3. Pickering A Nuclear Generating Station.
4. Pickering B Nuclear Generating Station.
5. Darlington Nuclear Generating Station. O. Reg. 53/05, s. 2; O. Reg. 23/07, s. 2.

Prescribed date for s. 78.1 (2) of the Act

3. April 1, 2008 is prescribed for the purposes of subsection 78.1 (2) of the Act. O. Reg. 53/05, s. 3.

Payment amounts under s. 78.1 (2) (a) of the Act

4. (1) For the purpose of clause 78.1 (2) (a) of the Act, the amount of a payment that the IESO is required to make with respect to a unit at a generation facility prescribed under section 2 is,

(a) for the hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2, $33.00 per megawatt hour with respect to output that is generated during the period from April 1, 2005 to the later of,
   (i) March 31, 2008, and

(ii) the day before the effective date of the Board's first order in respect of Ontario Power Generation Inc.; and

(b) for the nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2, $49.50 per megawatt hour with respect to output that is generated during the period from April 1, 2005 to the later of,

(i) March 31, 2008, and

(ii) the day before the effective date of the Board's first order in respect of Ontario Power Generation Inc. O. Reg. 53/05, s. 4 (1).

(2) Despite subsection (1), for the purpose of clause 78.1 (2) (a) of the Act, if the total combined output of the hydroelectric generation facilities prescribed under paragraphs 1 and 2 of section 2 exceeds 1,900 megawatt hours in any hour, the total amount of the payment that the IESO is required to make with respect to the units at those generation facilities is, for that hour, the sum of the following amounts:

1. The total amount determined for those facilities under clause (1) (a), for the first 1,900 megawatt hours of output.

2. The product obtained by multiplying the market price determined under the market rules by the number of megawatt hours of output in excess of 1,900 megawatt hours. O. Reg. 53/05, s. 4 (2).

(2.1) The total amount of the payment under subsection (2) shall be allocated to the hydroelectric generation facilities prescribed under paragraphs 1 and 2 of section 2 on a proportionate basis equal to each facility's percentage share of the total combined output in that hour for those facilities. O. Reg. 269/05, s. 1.

(2.2) Subsection (2.1) applies in respect of amounts payable on and after April 1, 2005. O. Reg. 269/05, s. 1.

(3) For the purpose of this section, the output of a generation facility shall be measured at the facility's delivery points, as determined in accordance with the market rules. O. Reg. 53/05, s. 4 (3).

Deferral and variance accounts

5. (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records capital and non-capital costs incurred and revenues earned or foregone on or after April 1, 2005 due to deviations from the forecasts as set out in the document titled "Forecast Information (as of Q3/2004) for Facilities Prescribed under Ontario Regulation 53/05" posted and available on the Ontario Energy Board website, that are associated with,

(a) differences in hydroelectric electricity production due to differences between forecast and actual water conditions;

(b) unforeseen changes to nuclear regulatory requirements or unforeseen technological changes which directly affect the nuclear generation facilities, excluding revenue requirement impacts described in subsections 5.1 (1) and 5.2 (1);

(c) changes to revenues for ancillary services from the generation facilities prescribed under section 2;

(d) acts of God, including severe weather events; and

(e) transmission outages and transmission restrictions that are not otherwise compensated for through congestion management settlement credits under the market rules. O. Reg. 23/07, s. 3.

(2) The calculation of revenues earned or foregone due to changes in electricity production associated with clauses (1) (a), (b), (d) and (e) shall be based on the following prices:

1. $33.00 per megawatt hour from hydroelectric generation facilities prescribed in paragraphs 1 and 2 of section 2.

2. $49.50 per megawatt hour from nuclear generation facilities prescribed in paragraphs 3, 4 and 5 of section 2. O. Reg. 23/07, s. 3.

(3) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually. O. Reg. 23/07, s. 3.

(4) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records non-capital costs incurred on or after January 1, 2005 that are associated with the planned return to service of all units at the Pickering A Nuclear Generating Station, including those units which the board of directors of Ontario Power Generation Inc. has determined should be placed in safe storage. O. Reg. 23/07, s. 3.

(5) For the purposes of subsection (4), the non-capital costs include, but are not restricted to,

(a) construction costs, assessment costs, pre-engineering costs, project completion costs and demobilization costs; and

(b) interest costs, recorded as simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually. O. Reg. 23/07, s. 3.

Nuclear liability deferral account, transition

5.1 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records for the period up to the effective date of the Board's first order under section 78.1 of the Act the revenue requirement impact of any change in its nuclear decommissioning liability arising from an approved reference plan, approved after April 1, 2005, as reflected in the audited financial statements approved by the board of directors of Ontario Power Generation Inc. O. Reg. 23/07, s. 3.

(2) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually. O. Reg. 23/07, s. 3.

Nuclear liability deferral account

5.2 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under 78.1 of the Act, the revenue requirement impact of changes in its total nuclear decommissioning liability between,

(a) the liability arising from the approved reference plan incorporated into the Board's most recent order under section 78.1 of the Act; and

(b) the liability arising from the current approved reference plan. O. Reg. 23/07, s. 3.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 23/07, s. 3.

Nuclear development deferral account, transition

5.3 (1) Ontario Power Generation Inc. shall establish a deferral account in connection with section 78.1 of the Act that records, for the period up to the effective date of the Board's first order under section 78.1 of the Act, the costs incurred and firm financial commitments made on or after June 13, 2006, in the course of planning and preparation for the development of proposed new nuclear generation facilities that are associated with any one or more of the following activities:

1. Activities for carrying out an environmental assessment under the *Canadian Environmental Assessment Act*.
2. Activities for obtaining any governmental licence, authorization, permit or other approval.
3. Activities for carrying out a technology assessment or for defining all commercial and technical requirements to, or with, any third parties. O. Reg. 27/08, s. 1.

(2) Ontario Power Generation Inc. shall record simple interest on the monthly opening balance of the account at an annual rate of 6 per cent applied to the monthly opening balance in the account, compounded annually. O. Reg. 27/08, s. 1.

Nuclear development variance account

5.4 (1) Ontario Power Generation Inc. shall establish a variance account in connection with section 78.1 of the Act that records, on and after the effective date of the Board's first order under section 78.1 of the Act, differences between actual non-capital costs incurred and firm financial commitments made and the amount included in payments made under that section for planning and preparation for the development of proposed new nuclear generation facilities. O. Reg. 27/08, s. 1.

(2) Ontario Power Generation Inc. shall record interest on the balance of the account as the Board may direct. O. Reg. 27/08, s. 1.

Rules governing determination of payment amounts by Board

6. (1) Subject to subsection (2), the Board may establish the form, methodology, assumptions and calculations used in making an order that determines payment amounts for the purpose of section 78.1 of the Act. O. Reg. 53/05, s. 6 (1).

(2) The following rules apply to the making of an order by the Board that determines payment amounts for the purpose of section 78.1 of the Act:

1. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the variance account established under subsection 5 (1) over a period not to exceed three years, to the extent that the Board is satisfied that,
    i. the revenues recorded in the account were earned or foregone and the costs were prudently incurred, and
    ii. the revenues and costs are accurately recorded in the account.
2. In setting payment amounts for the assets prescribed under section 2, the Board shall not adopt any methodologies, assumptions or calculations that are based upon the contracting for all or any portion of the output of those assets.
3. The Board shall ensure that Ontario Power Generation Inc. recovers the balance recorded in the deferral account established under subsection 5 (4). The Board shall authorize recovery of the balance on a straight line basis over a period not to exceed 15 years.
4. The Board shall ensure that Ontario Power Generation Inc. recovers capital and non-capital costs, and firm financial commitments incurred to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2, including, but not limited to, assessment costs and pre-engineering costs and commitments,
    i. if the costs and financial commitments were within the project budgets approved for that purpose by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., or
    ii. if the costs and financial commitments were not approved by the board of directors of Ontario Power Generation Inc. before the making of the Board's first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., if the Board is satisfied that the costs were prudently incurred and that the financial commitments were prudently made.

4.1 The Board shall ensure that Ontario Power Generation Inc. recovers the costs incurred and firm financial commitments made in the course of planning and preparation for the development of proposed new nuclear generation facilities, to the extent the Board is satisfied that,
    i. the costs were prudently incurred, and
    ii. the financial commitments were prudently made.

5. In making its first order under section 78.1 of the Act in respect of Ontario Power Generation Inc., the Board shall accept the amounts for the following matters as set out in Ontario Power Generation Inc.'s most recently audited financial statements that were approved by the board of directors of Ontario Power Generation Inc. before the effective date of that order:
    i. Ontario Power Generation Inc.'s assets and liabilities, other than the variance account referred to in subsection 5 (1), which shall be determined in accordance with paragraph 1.
    ii. Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations.
    iii. Ontario Power Generation Inc.'s costs with respect to the Bruce Nuclear Generating Stations.
6. Without limiting the generality of paragraph 5, that paragraph applies to values relating to,
    i. capital cost allowances,
    ii. the revenue requirement impact of accounting and tax policy decisions, and
    iii. capital and non-capital costs and firm financial commitments to increase the output of, refurbish or add operating capacity to a generation facility referred to in section 2.
7. The Board shall ensure that the balances recorded in the deferral accounts established under subsections 5.1 (1) and 5.2 (1) are recovered on a straight line basis over a period not to exceed three years, to the extent that the Board is satisfied that revenue requirement impacts are accurately recorded in the accounts, based on the following items, as reflected in the audited financial statements approved by the board of directors of Ontario Power Generation Inc.,
    i. return on rate base,
    ii. depreciation expense,
    iii. income and capital taxes, and

iv. fuel expense.

7.1 The Board shall ensure the balances recorded in the deferral account established under subsection 5.3 (1) and the variance account established under subsection 5.4 (1) are recovered on a straight line basis over a period not to exceed three years, to the extent the Board is satisfied that,

i. the costs were prudently incurred, and

ii. the financial commitments were prudently made.

8. The Board shall ensure that Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan.

9. The Board shall ensure that Ontario Power Generation Inc. recovers all the costs it incurs with respect to the Bruce Nuclear Generating Stations.

10. If Ontario Power Generation Inc.'s revenues earned with respect to any lease of the Bruce Nuclear Generating Stations exceed the costs Ontario Power Generation Inc. incurs with respect to those Stations, the excess shall be applied to reduce the amount of the payments required under subsection 78.1 (1) of the Act with respect to output from the nuclear generation facilities referred to in paragraphs 3, 4 and 5 of section 2. O. Reg. 23/07, s. 4; O. Reg. 27/08, s. 2.

7. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 53/05, s. 7.

APPENDIX F

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

FINAL ISSUES LIST

Ontario Power Generation Inc.
2011-2012 Payment Amounts for
Prescribed Generating Facilities
EB-2010-0008

FINAL ISSUES LIST

1. GENERAL

1.1 Has OPG responded appropriately to all relevant Board directions from previous proceedings?

1.2 Are OPG's economic and business planning assumptions for 2011-2012 an appropriate basis on which to set payment amounts?

1.3 Is the overall increase in 2011 and 2012 revenue requirement reasonable given the overall bill impact on consumers?

2. RATE BASE

2.1 What is the appropriate amount for rate base?

2.2 Is OPG's proposal to include CWIP in rate base for the Darlington Refurbishment Project appropriate?

3. CAPITAL STRUCTURE AND COST OF CAPITAL

3.1 What is the appropriate capital structure and rate of return on equity?

3.2 Are OPG's proposed costs for its long-term and short-term debt components of its capital structure appropriate?

3.3 Should the same capital structure and cost of capital be used for both OPG's regulated hydroelectric and nuclear businesses? If not, what capital structure and/or cost of capital parameters are appropriate for each business?

4. CAPITAL PROJECTS

Regulated Hydroelectric

4.1 Do the costs associated with the regulated hydroelectric projects, that are subject to section 6(2)4 of O. Reg. 53/05 and proposed for recovery, meet the requirements of that section? Are any additional costs prudent?

4.2 Are the capital budgets and/or financial commitments for 2011 and 2012 for the regulated hydroelectric business appropriate and supported by business cases?

4.3 Are the proposed in-service additions for regulated hydroelectric projects appropriate?

Nuclear

4.4 Do the costs associated with the nuclear projects, that are subject to section 6(2)4 and 6(2)4.1 of O. Reg. 53/05 and proposed for recovery, meet the requirements of that section? Are any additional costs prudent?

4.5 Are the capital budgets and/or financial commitments for 2011 and 2012 for the nuclear business appropriate and supported by business cases?

4.6 Are the proposed in-service additions for nuclear projects appropriate?

4.7 Is the proposed treatment for the Pickering Units 2 and 3 isolation project costs appropriate?

5. PRODUCTION FORECASTS

Regulated Hydroelectric

5.1 Is the proposed regulated hydroelectric production forecast appropriate?

Nuclear

5.2 Is the proposed nuclear production forecast appropriate?

6. OPERATING COSTS

Regulated Hydroelectric

6.1 Is the test period Operations, Maintenance and Administration budget for the regulated hydroelectric facilities appropriate?

6.2 Is the benchmarking methodology reasonable? Are the benchmarking results and targets flowing from those results for OPG's hydroelectric facilities reasonable?

Nuclear

6.3 Is the test period Operations, Maintenance and Administration budget for the nuclear facilities appropriate?

6.4 Is the benchmarking methodology reasonable? Are the benchmarking results and targets flowing from those results for OPG's nuclear facilities reasonable?

6.5 Has OPG responded appropriately to the observations and recommendations in the benchmarking report?
6.6 Is the forecast of nuclear fuel costs appropriate?
6.7 Are the proposed expenditures related to continued operations at Pickering B appropriate?

Corporate Costs

6.8 Are the 2011 and 2012 human resource related costs (wages, salaries, benefits, incentive payments, FTEs and pension costs) appropriate?
6.9 Are the "Centralized Support and Administrative Costs" (which include Corporate Support and Administrative Service Groups, Centrally Held Costs and Hydroelectric Common Services) and the allocation of the same to the regulated hydroelectric business and nuclear business appropriate?
6.10 Is OPG responding appropriately to the findings in the Human Resources and Finance Benchmarking Reports?

Other Costs

6.11 Are the amounts proposed to be included in the test period revenue requirement for other operating cost items, including depreciation expense, income and property taxes, appropriate?
6.12 Are the asset service fee amounts charged to the regulated hydroelectric business and nuclear business appropriate?

7. OTHER REVENUES

Regulated Hydroelectric

7.1 Are the proposed test period regulated hydroelectric business revenues from ancillary services, segregated mode of operation and water transactions appropriate?

Nuclear

7.2 Are the proposed test period nuclear business non-energy revenues appropriate?

Bruce Nuclear Generating Station

7.3 Are the test period costs related to the Bruce Nuclear Generating Station, and costs and revenues related to the Bruce lease appropriate?

8. NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING LIABILITIES

8.1 Have any regulatory or other bodies issued position or policy papers, or made decisions, with respect to Asset Retirement Obligations that the Board should consider in determining whether to retain the existing methodology or adopt a new or modified methodology?

8.2 Is the revenue requirement amount for nuclear liabilities related to nuclear waste management and decommissioning costs appropriately determined?

9. DESIGN OF PAYMENT AMOUNTS

9.1 Is the design of regulated hydroelectric and nuclear payment amounts appropriate?

9.2 Is the hydroelectric incentive mechanism appropriate?

10. DEFERRAL AND VARIANCE ACCOUNTS

10.1 Is the nature or type of costs recorded in the deferral and variance accounts appropriate?

10.2 Are the balances for recovery in each of the deferral and variance accounts appropriate?

10.3 Is the disposition methodology appropriate?

10.4 Is the proposed continuation of deferral and variance accounts appropriate?

10.5 Should the proposed variance account related to IESO non-energy charges be established?

10.6 What other deferral and variance accounts, if any, should be established for the test period?

11. REPORTING AND RECORD KEEPING REQUIREMENTS

11.1 What reporting and record keeping requirements should be established for OPG?

12. METHODOLOGIES FOR SETTING PAYMENT AMOUNTS

The Board Report, *A Regulatory Methodology for Setting Payment Amounts for the Prescribed Generation Assets of Ontario Power Generation Inc.*, EB-2006-0064, November 30, 2006, stated that, “The Board will implement an incentive regulation

formula when it is satisfied that the base payment provides a robust starting point for that formula."

12.1 When would it be appropriate for the Board to establish incentive regulation, or other form of alternative rate regulation, for setting payment amounts?

12.2 What processes should be adopted to establish the framework for incentive regulation, or other form of alternative rate regulation, that would be applied in a future test period?

APPENDIX G

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

MEMORANDUM OF AGREEMENT BETWEEN OPG AND THE PROVINCE OF ONTARIO

Filed: 2010-05-26
EB-2010-0008
Exhibit A1-4-1
Attachment 2

Memorandum of Agreement

BETWEEN

Her Majesty the Crown in Right of Ontario (the "Shareholder")
And
Ontario Power Generation ("OPG")

Purpose

This document serves as the basis of agreement between Ontario Power Generation Inc. ("**OPG**") and its sole Shareholder, Her Majesty the Queen in Right of the Province of Ontario as represented by the Minister of Energy (the "**Shareholder**") on mandate, governance, performance, and communications This agreement is intended to promote a positive and co-operative working relationship between OPG and the Shareholder

OPG will operate as a commercial enterprise with an independent Board of Directors, which will at all times exercise its fiduciary responsibility and a duty of care to act in the best interests of OPG.

A. Mandate

1. OPG's core mandate is electricity generation. It will operate its existing nuclear, hydroelectric, and fossil generating assets as efficiently and cost-effectively as possible, within the legislative and regulatory framework of the Province of Ontario and the Government of Canada, in particular, the Canadian Nuclear Safety Commission. OPG will operate these assets in a manner that mitigates the Province's financial and operational risk.

2. OPG's key nuclear objective will be the reduction of the risk exposure to the Province arising from its investment in nuclear generating stations in general and, in particular, the refurbishment of older units. OPG will continue to operate with a high degree of vigilance with respect to nuclear safety.

3. OPG will seek continuous improvement in its nuclear generation business and internal services. OPG will benchmark its performance in these areas against CANDU nuclear plants worldwide as well as against the top quartile of private and publicly- owned nuclear electricity generators in North America. OPG's top operational priority will be to improve the operation of its existing nuclear fleet.

4. With respect to investment in new generation capacity, OPG's priority will be hydro- electric generation capacity. OPG will seek to expand, develop and/or improve its hydro- electric generation capacity. This will include expansion and redevelopment on its existing sites as well as the pursuit of new projects where feasible. These investments will be taken by OPG through partnerships or on its own, as appropriate.

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EB-2010-0008
Exhibit A1-4-1
Attachment 2

5. OPG will not pursue investment in non-hydro-electric renewable generation projects unless specifically directed to do so by the Shareholder.

6. OPG will continue to operate its fossil fleet, including coal plants, according to normal commercial principles taking into account the Government's coal replacement policy and recognizing the role that fossil plants play in the Ontario electricity market, until government regulation and/or unanimous shareholder declarations require the closure of coal stations.

7. OPG will operate in Ontario in accordance with the highest corporate standards, including but not limited to the areas of corporate governance, social responsibility and corporate citizenship.

8. OPG will operate in Ontario in accordance with the highest corporate standards for environmental stewardship taking into account the Government's coal replacement policy.

B Governance Framework

The governance relationship between OPG and the Shareholder is anchored on the following:

1. OPG will maintain a high level of accountability and transparency:

   - OPG is an *Ontario Business Corporations Act* ("OBCA") company and is subject to all of the governance requirements associated with the OBCA.
   - OPG is also subject to the *Freedom of Information and Protection of Privacy Act*, the *Public Sector Salary Disclosure Act* and the *Auditor General Act*.
   - OPG's regulated assets will be subject to public review and assessment by the Ontario Energy Board.
   - OPG will annually appear before a committee of the Legislature which will review OPG's financial and operational performance.

2. The Shareholder may at times direct OPG to undertake special initiatives. Such directives will be communicated as written declarations by way of a Unanimous Shareholder Agreement or Declaration in accordance with Section 108 of the OBCA, and be made public within a reasonable timeframe.

C. Generation Performance and Investment Plans

1. OPG will annually establish 3 –5 year performance targets based on operating and financial results as well as major project execution. Key measures are to be agreed upon with the Shareholder and the Minister of

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EB-2010-0008
Exhibit A1-4-1
Attachment 2

Finance. These performance targets will be benchmarked against the performance of the top quartile of electricity generating companies in North America.

2. Benchmarking will need to take account of key specific operational and technology factors including the operation of CANDU reactors worldwide, the role that OPG's coal plants play in the Ontario electricity market with respect to load following, and the Government of Ontario's coal replacement policy.

3. OPG will annually prepare a 3 – 5 year investment plan for new projects.

4. Once approved by OPG's Board of Directors, OPG's annual performance targets and investment plan will be submitted to the Shareholder and the Minister of Finance for concurrence.

D. Financial Framework

1. As an OBCA corporation with a commercial mandate, OPG will operate on a financially sustainable basis and maintain the value of its assets for its shareholder, the Province of Ontario.

2. As a transition to a sustainable financial model, any significant new generation project approved by the OPG Board of Directors and agreed to by the Shareholder may receive financial support from the Province of Ontario, if and as appropriate.

E. Communication and Reporting

1. OPG and the Shareholder will ensure timely reports and information on major developments and issues that may materially impact the business of OPG or the interests of the Shareholder. Such reporting from OPG should be on an immediate or, at minimum, an expedited basis where an urgent material human safety or system reliability matter arises.

2. OPG will ensure the Minister of Finance receives timely reports and information on multi-year and annual plans and major developments that may have a material impact on the financial performance of OPG or the Shareholder.

3. The OPG Board of Directors and the Minister of Energy will meet on a quarterly basis to enhance mutual understanding of interrelated strategic matters.

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Exhibit A1-4-1
Attachment 2

4. OPG's Chair, President and Chief Executive Officer and the Minister of Energy will meet on a regular basis, approximately nine times per year.

5. OPG's Chair, President and Chief Executive Officer and the Minister of Finance will meet on an as needed basis.

6. OPG's senior management and senior officials of the Ministry of Energy and the Ministry of Finance will meet on a regular and as needed basis to discuss ongoing issues and clarify expectations or to address emergent issues.

7. OPG will provide officials in the Ministry of Energy and the Ministry of Finance with multi-year and annual business planning information, quarterly and monthly financial reports and briefings on OPG's operational and financial performance against plan.

8. In all other respects, OPG will communicate with government ministries and agencies in a manner typical for an Ontario corporation of its size and scope.

F. Review of this Agreement

This agreement will be reviewed and updated as required.

Dated: the 17th day of August, 2005

On Behalf of OPG:

Jake Epp
Chairman
Board of Directors

On Behalf of the Shareholder:

Her Majesty the Queen in Right of the Province of Ontario as represented by the Minister of Energy, Dwight Duncan

APPENDIX H

TO

DECISION WITH REASONS

ONTARIO POWER GENERATION INC.

EB-2010-0008

CALCULATION OF RETURN ON EQUITY BASED ON NOVEMBER 2010 DATA

Return on Equity and Deemed Long-term Debt Rate

Step 1: Analysis of Business Day Information in the Month

Month: November 2010

Day		Bond Yields (%) Government of Canada 10-yr	Government of Canada 30-yr	A-rated Utility 30-yr	Bond Yield Spreads (%) 30-yr Govt over 10-yr Govt	30-yr Util over 30-yr Govt
1	1-Nov-10	2.84	3.47	4.97	0.64	1.50
2	2-Nov-10	2.87	3.48	4.92	0.61	1.43
3	3-Nov-10	2.87	3.50	4.94	0.63	1.44
4	4-Nov-10	2.81	3.48	4.92	0.66	1.44
5	5-Nov-10	2.85	3.49	4.95	0.64	1.47
6	6-Nov-10					
7	7-Nov-10					
8	8-Nov-10	2.89	3.51	4.94	0.62	1.43
9	9-Nov-10	2.98	3.57	4.97	0.60	1.40
10	10-Nov-10	2.97	3.59	4.94	0.62	1.35
11	11-Nov-10	2.97	3.59	4.94	0.62	1.35
12	12-Nov-10	3.02	3.63	4.97	0.61	1.34
13	13-Nov-10					
14	14-Nov-10					
15	15-Nov-10	3.15	3.73	5.08	0.58	1.36
16	16-Nov-10	3.08	3.68	5.02	0.60	1.34
17	17-Nov-10	3.10	3.67	5.02	0.58	1.35
18	18-Nov-10	3.12	3.67	5.04	0.54	1.38
19	19-Nov-10	3.14	3.62	5.03	0.47	1.42
20	20-Nov-10					
21	21-Nov-10					
22	22-Nov-10	3.09	3.59	5.00	0.50	1.42
23	23-Nov-10	3.11	3.60	5.04	0.49	1.45
24	24-Nov-10	3.19	3.65	5.05	0.46	1.40
25	25-Nov-10	3.17	3.64	5.04	0.47	1.40
26	26-Nov-10	3.11	3.57	5.02	0.46	1.45
27	27-Nov-10					
28	28-Nov-10					
29	29-Nov-10	3.09	3.52	4.98	0.44	1.46
30	30-Nov-10	3.06	3.48	4.95	0.42	1.47
31						
		3.02	3.58	4.99	**0.556**	**1.410**
	Sources:	*Bank of Canada*		*Bloomberg LP.*	❶	❷

Step 2: 10-Year Government of Canada Bond Yield Forecast

Source: *Consensus Forecasts* Publication Date: November 8, 2010

	3-month	12-month	Average
November 2010	2.800	3.300 ❸	**3.050** %

Step 3: Long Canada Bond Forecast

10 Year Government of Canada Concensus Forecast (from Step 2) ❹	3.050 %
Actual Spread of 30-year over 10-year Government of Canada Bond Yield (from Step 1) ❺	0.556 %
Long Canada Bond Forecast (LCBF) ❻	**3.606** %

Step 4: Return on Equity (ROE) forecast

Initial ROE		9.75 %
Change in Long Canada Bond Yield Forecast from September 2009		
LCBF (November 2010) (from Step 3 ❻)	3.606 %	
Base LCBF	4.250 %	
Difference	-0.644 %	
0.5 X Difference		-0.322 %
Change in A-rated Utility Bond Yield Spread from September 2009		
A-rated Utility Bond Yield Spread (November 2010) (from Step 1) ❷	1.410 %	
Base A-rated Utility Bond Yield Spread	1.415 %	
Difference	-0.005 %	
0.5 X Difference		-0.002 %
Return on Equity based on November 2010 data		**9.43** %

Step 5: Deemed Long-term Debt Rate Forecast

Long Canada Bond Forecast for November 2010 (from Step 3) ❻	3.606 %
A-rated Utility Bond Yield Spread November 2010 (from Step 1) ❷	1.410 %
Deemed Long-term Debt Rate based on November 2010 data	**5.02** %

References on Calculation Methods:

- **Return on Equity**: Appendix B of the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities*, issued December 11, 2009.
- **Deemed Long-term Debt Rate**: Appendix C of the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities*, issued December 11, 2009.

ONTARIO ENERGY BOARD

FILE NO.: **EB-2010-0008**

VOLUME: **13**

DATE: **October 29, 2010**

BEFORE:	**Cynthia Chaplin**	**Presiding Member and Vice-Chair**
	Cathy Spoel	**Member**
	Marika Hare	**Member**

EB-2010-0008

THE ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule B);

AND IN THE MATTER OF an application by Ontario Power Generation Inc. pursuant to section 78.1 of the *Ontario Energy Board Act, 1998* for an order or orders determining payment amounts for the output of certain of its generating facilities.

Hearing held at 2300 Yonge Street,
25th Floor, Toronto, Ontario,
on Friday, October 29th, 2010,
commencing at 9:12 a.m.

VOLUME 13

BEFORE:

CYNTHIA CHAPLIN	Presiding Member and Vice-Chair
CATHY SPOEL	Member
MARIKA HARE	Member

A P P E A R A N C E S

MICHAEL MILLAR	Board Counsel
VIOLET BINETTE CHRIS CINCAR	Board Staff
CRAWFORD SMITH CARLTON MATHIAS	Ontario Power Generation
BASIL ALEXANDER	Pollution Probe
MICHAEL BUONAGURO	Vulnerable Energy Consumers' Coalition (VECC)
DAVID POCH	Green Energy Coalition (GEC)
JAY SHEPHERD	School Energy Coalition (SEC)
STANLEY PUI	Society of Energy Professionals
DAVID CROCKER	Association of Major Power Consumers of Ontario (AMPCO)
ROBERT WARREN	Consumers' Council of Canada (CCC)
RICHARD STEPHENSON	Power Workers' Union (PWU)
VINCE DeROSE	Canadian Manufacturers & Exporters (CME)

ALSO PRESENT:

BARB REUBER	Ontario Power Generation
SHELLEY GRICE	AMPCO
JACK GIBBONS	Pollution Probe

I N D E X O F P R O C E E D I N G S

E X H I B I T S

U N D E R T A K I N G S

Friday, October 29, 2010

--- Upon commencing at 9:12 a.m.

MS. CHAPLIN: Please be seated.

Good morning. Are there any preliminary matters before we swear the panel in?

MR. SMITH: No, they are not.

MS. CHAPLIN: Okay. Why don't you go ahead, Mr. Smith?

MR. SMITH: Members of the Panel, I would introduce you to Mr. Andrew Barrett and Mr. Ralph Luciani to be sworn.

ONTARIO POWER GENERATION - PANEL 10B

Andrew Barrett, Sworn

Ralph Luciani, Sworn

EXAMINATION-IN-CHIEF BY MR. SMITH:

MR. SMITH: Mr. Barrett, why don't we start with you? I understand that you are the vice president, regulatory affairs and corporate strategy?

MR. BARRETT: Yes, that's correct.

MR. SMITH: And in that capacity, you are responsible for, among other things, directing OPG's regulatory strategy?

MR. BARRETT: Yes, that's right.

MR. SMITH: And for directing the company's interactions with economic regulators and reliability organizations in Canada and the United States?

MR. BARRETT: Yes, that's true.

MR. SMITH: And that includes, of course, this Board?

MR. BARRETT: Yes.

MR. SMITH: And the Federal Energy Regulatory Commission in the United States, among others?

MR. BARRETT: Yes, that's right.

MR. SMITH: I understand that you have a bachelor of applied science and civil engineering from the University of Waterloo?

MR. BARRETT: Correct.

MR. SMITH: As well as an MBA in finance and accounting from McMaster University?

MR. BARRETT: Yes, that's right.

MR. SMITH: And you have been employed by Ontario Power Generation or Ontario Hydro since 1998?

MR. BARRETT: I have.

MR. SMITH: And in your current position as vice president, regulatory affairs and corporate strategy, since 2004?

MR. BARRETT: Yes, that's right.

MR. SMITH: And for some period of time in the '90s, you were employed by the Ontario Energy Board as the manager of applications and financial monitoring?

MR. BARRETT: Yes, that's right.

MR. SMITH: I understand that you are a member of the Professional Engineers of Ontario?

MR. BARRETT: Yes.

MR. SMITH: And were you responsible for or did you assist in the preparation of OPG's evidence in relation to construction work in progress?

MR. BARRETT: I did.

MR. SMITH: And do you adopt that evidence for the purposes of this proceeding?

MR. BARRETT: I do adopt it.

MR. SMITH: And, similarly, were you responsible or did you assist in the preparation of answers to interrogatories asked in respect of that evidence?

MR. BARRETT: I was.

MR. SMITH: And do you adopt that evidence for the purposes of this proceeding?

MR. BARRETT: I do adopt it.

MR. SMITH: Mr. Luciani, I understand that you are the vice president or a vice president with Charles River Associates?

MR. LUCIANI: That's correct.

MR. SMITH: And members of the Board, you should have a copy of Mr. Luciani's CV, which was at L-2, schedule 6 for reference.

And you are a consultant, sir, with Charles River Associates?

MR. LUCIANI: Yes, I am.

MR. SMITH: And you have been with Charles River Associates since 2001?

MR. LUCIANI: That's correct.

MR. SMITH: And, as I understand it, your consultancy practice focuses primarily on energy regulatory matters?

MR. LUCIANI: Yes, it does.

MR. SMITH: And prior to that, you worked for PHB

Hagler Bailly, which is also a consultancy?

MR. LUCIANI: Yes, it is.

MR. SMITH: And did your practice similarly focus on energy regulatory matters?

MR. LUCIANI: Yes, it did.

MR. SMITH: I understand that you have a master's in industrial administration from Carnegie Mellon University?

MR. LUCIANI: That's correct.

MR. SMITH: And you have an electrical engineering degree, as well as an economics degree, from Carnegie Mellon University, as well?

MR. LUCIANI: Correct.

MR. SMITH: As I understand it from your CV, you have over 20 years of experience analyzing economic and financial issues affecting regulated industries?

MR. LUCIANI: That's correct.

MR. SMITH: And that includes in respect of electricity rate making, as well as construction work in progress?

MR. LUCIANI: Yes, it does.

MR. SMITH: And you have testified, as I understand it, before regulators in Canada and in the United States; is that correct?

MR. LUCIANI: Correct.

MR. SMITH: And as I understand from your CV, that testimony includes testimony before boards in -- various state boards, including Arkansas, Kansas, Kentucky, Louisiana, Maryland, Missouri, Ohio and Pennsylvania?

MR. LUCIANI: Correct.

MR. SMITH: You have tendered evidence before this Board?

MR. LUCIANI: Yes, I have.

MR. SMITH: As well as before the Federal Energy Regulatory Commission?

MR. LUCIANI: Yes.

MR. SMITH: And you have testified in U.S. bankruptcy proceedings, as well?

MR. LUCIANI: That's correct.

MR. SMITH: As well as before the U.S. Postal Rate Commission; is that correct?

MR. LUCIANI: Yes.

MR. SMITH: And as I understand it, you have filed written evidence or given direct testimony to regulatory commissions approximately 30 times?

MR. LUCIANI: Approximately 30, yes.

MR. SMITH: And have you ever failed to be qualified as an expert to provide testimony to those various boards?

MR. LUCIANI: No.

MR. SMITH: Now, I understand that you prepared a report, which can be found at Exhibit D4, tab 1, schedule 1?

MR. LUCIANI: Yes, that's correct.

MR. SMITH: And before we go to that, looking at your CV, sir, I understand your CV summarizes a number of recent projects that you have been involved in. And just looking at page 2, there is a reference at the top to nuclear

power. Can you tell me a bit more about that project?

MR. LUCIANI: Sure. On behalf of Duke Power, which is planning the construction of a new nuclear facility, I worked with them to develop the financial models that would be used to apply for DOE financing or supported financing of the new nuclear facility.

I built the model that dealt with the regulatory processes for Duke Power in North and South Carolina, including CWIP in rate base, for the facility. I worked with Standard & Poor's, who was also involved in the project on behalf of Duke to rate the -- rate the proposal that Duke was putting in for credit quality.

MR. SMITH: And the testimony that you have given before the various boards, as I understand it, you have consulted both on behalf of utilities, as well as customer groups; is that correct?

MR. LUCIANI: That's correct.

MR. SMITH: And you have recently been retained by FERC to provide advice; is that correct?

MR. LUCIANI: Yes. We just completed a study on behalf of the Federal Energy Regulatory Commission dealing with the Entergy region joining the Southwest Power Pool dealing. We were retained as an independent consultant by the FERC.

MR. SMITH: Just again returning to D4, tab 1, schedule 1, how did the issues addressed in that report relate to your expertise?

MR. LUCIANI: The issues in the report deal with CWIP

proposals and CWIP treatment in the United States, and I have been dealing with regulatory matters and ratemaking and revenue requirement matters in the United States for more than 20 years.

And it reflects my understanding of the lay of the land in the United States on this particular matter, and recent trends in the CWIP in rate base area.

MR. SMITH: And, sir, if I can ask you, how have you been, or have you been, compensated and, if so, how, in respect of the report and appearing before this Board today?

MR. LUCIANI: It is on a standard time and materials basis.

MR. SMITH: And is your compensation at all dependent on the outcome of this case?

MR. LUCIANI: It is not.

MR. SMITH: And other than the preparation of the report at tab 1, schedule -- D4, tab 1, schedule 1 and appearing today, what consulting or other activities have you undertaken on behalf of OPG?

MR. LUCIANI: None.

MR. SMITH: Members of the Panel, I would tender Mr. Luciani as an expert in electric utility regulation in the United States, including the treatment of CWIP.

MR. POCH: Madam Chair, I have some concerns and would like the opportunity to ask a few questions on the question of Mr. Luciani's independence as an expert opinion giver.

MS. CHAPLIN: All right. Go ahead.

CROSS-EXAMINATION BY MR. POCH:

MR. POCH: Mr. Luciani, I would ask you and the panel to turn up Exhibit L-4, schedule 5, attachment 1.

MS. CHAPLIN: Can you tell us what issue number that exhibit is under?

MR. POCH: I assume it is under the CWIP issue, which would be 2.2. The reference is L-4, schedule 5, and then we will turn to attachment 1.

MR. LUCIANI: Yes, I have it.

MR. POCH: And actually, just looking at the cover interrogatory, Mr. Luciani, the response describes the attachment as your engagement letter for the provision of regulatory support for 2009, 2010, 2011 and --

MR. LUCIANI: Yes. For Charles River Associates, yes.

MR. POCH: And did you draft this letter to Mr. Anderson?

MR. LUCIANI: No.

MR. POCH: Someone in your organization did, or --

MR. LUCIANI: Yes. Mr. Adamson.

MR. POCH: Okay. Prior to the drafting of this letter of engagement, had research been done on the particular situation that OPG finds itself in, as opposed to -- obviously, you have indicated you have had obviously some involvement with the CWIP issues in the states already.

But was any work done looking into the particulars of the OPG situation?

MR. LUCIANI: Are you talking about from CRA's perspective?

MR. POCH: Yes.

MR. LUCIANI: Not to my knowledge. I had not done any.

MR. POCH: All right.

MR. BARRETT: Sorry, Mr. Poch -- sorry, if I could be of assistance, CRA has done prior regulatory work for us, but not in respect of CWIP.

MR. POCH: All right. And the letter of engagement -- and I will bring certain portions of it to the Board's attention in a moment, presumably -- it talks about the approach that you will take, first step to develop a -- expert report supporting OPG's position, and providing illustrations.

Did that white paper get produced, or did you go directly to producing the evidence in this case?

MR. LUCIANI: In the 2008 time frame, I began my research into the CWIP treatment in the United States, the specific research that ended up in this report here in evidence today.

And so there was a -- an earlier version of this report that was created in the 2008-2009 time frame.

MR. POCH: Well, in fact under number 1, it says:

> "OPG has selected CRA to create a white paper that outlines the case for inclusion of CWIP."

Would that earlier work be in support of that request from OPG?

MR. LUCIANI: I don't know specifically how OPG was planning to use my research, other than to perhaps provide

it to various stakeholders in the Ontario region.

MR. POCH: Right. It refers to that possibility under 2, the "Development of alliances," where it says:

> "OPG must seek out potential allies who share its position. At the conclusion of the white paper creation, OPG in conjunction with CRA may choose to socialize the paper with various stakeholders in Ontario to gather support for the proposed approach."

In the following paragraph:

> "CRA's involvement will be, on an as-needed basis, to defend the white paper and bolster support for the general recommendation."

Were you involved in such a process? Or was your firm?

MR. LUCIANI: Neither me nor my firm.

MR. POCH: So this was a step that was ultimately not pursued? Is that my understanding? Is that --

MR. BARRETT: If I can be of assistance, Mr. Poch.

MR. POCH: Yes.

MR. BARRETT: The genesis of this work really was OPG looking at and seeing developments in the United States around the CWIP issue, particularly in respect of various nuclear projects, nuclear refurbishments and new nuclear projects.

And we saw a lot of merit in some of those developments. So we asked CRA to do a research paper, to summarize those developments and some of the thinking that

underpinned those developments, that we could use to talk to people in Ontario and see if we could build support for that, those kinds of developments in Ontario.

MR. POCH: I see.

MR. BARRETT: So the work in terms of item 2 was undertaken by OPG's staff, and not CRA staff.

MR. POCH: All right. And obviously part 3 is where we're at today?

MR. BARRETT: That's correct.

MR. POCH: Okay. Thank you. Those are all of the questions I have.

Madam Chair, I do wish to raise a concern with respect to the independence of this witness. Specifically, I can -- I will direct you to some case law. I don't know how we want to proceed on this. Perhaps if anybody else has any questions first?

The concern I have is ––

MR. SMITH: Sorry, just before my friend continues, ordinarily I would have a right of re-examination.

MS. CHAPLIN: Let's see -- does anybody else have any questions?

MR. WARREN: I have just one question.

MS. CHAPLIN: Go ahead, Mr. Warren.

CROSS-EXAMINATION BY MR. WARREN:

MR. WARREN: Mr. Luciani, other than the distinction that Mr. Barrett brought to your attention about the work that OPG staff did, does the letter, which is the exhibit that Mr. Poch refers to, does it accurately reflect the

terms of CRA's engagement on this project?

MR. LUCIANI: It certainly reflects the terms and conditions of our engagement.

The actual work that was done was an evolving process, so that the mention of this alliance work, of course, CRA did not do it all.

MR. WARREN: I appreciate that. But other than the alliance work, does the letter accurately reflect the terms and conditions on which CRA was retained for this brief?

MR. LUCIANI: Yes. And effectively, we were retained, as noted on the last page, that CRA will offer independent, objective opinion and analysis.

MR. WARREN: Thank you very much. Those are my questions.

MS. CHAPLIN: Any other questions? Mr. Smith?

MR. SMITH: I have no re-examination.

MS. CHAPLIN: One moment, please.

[Board Panel confers]

MS. CHAPLIN: All right. Mr. Poch, if you want to make submissions?

SUBMISSIONS BY MR. POCH:

MR. POCH: Thank you, Madam Chair.

Madam Chair, I've provided my friends a couple of days ago, and the Board, with two case reports, which I would ask be provided to the Panel at this time.

There are extra copies, if anybody needs hard copies, here.

MR. MILLAR: We have copies here, Madam Chair. The

first is R. and Inco and we will call that K13.1.

EXHIBIT NO. K13.1: R. AND INCO DECISION.

MR. MILLAR: And the second is United City Properties and Tong. We will call that K13.2.

EXHIBIT NO. K13.2: UNITED CITY PROPERTIES AND TONG DECISION.

MR. POCH: Which will answer the question you might have been asking yourself about why my friend spent so long qualifying his expert. He obviously anticipated this concern.

The concern I raise is not with respect to whether Mr. Luciani is familiar with CWIP and the extent of his familiarity with the topic. Rather, it is with respect to the threshold question as to whether Mr. Luciani's evidence ought to be admitted at all, because of what I submit is a compromising of independence.

And if the Board is to entertain the evidence, whether it should do so subject to a subsequent weighing, in light of the Board's ultimate conclusion on that question of independence. That is, if it is not rejected at the outset.

The two cases I provide you -- there are of course many cases available on this, but the two I have selected are relatively recent cases where the question of the independence of an expert witness has arisen, and I felt they were suitable, in that they canvass the state of the law of evidence in this matter in Canada.

I would like to take you, first, to the Inco decision.

K13.1.

This was the decision at the level of the Superior Court of Justice, and it is a 2006 decision. The facts aren't particularly relevant for our discussion. It was a prosecution of Inco under the Ontario Water Resources Act, and the question arose about the independence of expert evidence and the admissibility of that evidence, and that starts at page 9 of this case report, topic 8 in their listing there: "Exclusion of expert evidence."

The particular facts are that the expert there was employed by the Crown, and the question was whether the nature of that employment compromised his independence in the particular case.

If you turn to page 10 of the report, at paragraph 42, there begins a discussion about the procedures courts use to evaluate the independence of an expert, and the second sentence, it begins:

> "The inquiry requires that the trial judge, on a voir dire, look beyond the witness' employment relationship or retainer and consider the basis on which the opinion is proffered. Unless the terms of the retainer make the witness an obvious 'co-venturer' with the party, as in the case where the witness worked on a contingency fee arrangement which was dependent on the outcome of the case, the trial judge must examine the actual opinion evidence to be offered in a voir dire. The proposed expert's independence can be tested

> in the usual way, by cross-examination on his or her assumptions, research and completeness. The trial judge can then assess whether the expert has assumed the role of advocate."

Now, of course here, if we proceed to that step, we would not have a voir dire where we have excluded a jury, since you are both the judge and jury in this case, Madam Chair and Panel.

The case then goes on to canvass some of the law, and I would draw your attention to paragraph 46 on page 11, where here the Court of Appeal refers to:

> "The trial judge indicated that he was guided by the remarks of E. MacDonald J. in Fellowes, McNeil v. Kansa General International Insurance Company Ltd. et al. ... However, there is an important factual distinction between these two cases. In Fellowes, McNeil, the court found that the proposed expert had earlier been an advocate for the Kansa against Fellowes, McNeil. E. MacDonald J. set out the prior role played by the proposed expert. She found that he 'has been an advocate for Kansa's positions since he became involved in the matter...'"

So here, in discussing even the procedure, whether you embark on a voir dire and get into an analysis of the evidence and whether it appears on its face to be credible and independent, the cases have made a distinction between the situation where that witness has put himself in the

position of an advocate in the past. So that is even an earlier step, which is the step we find ourselves in here today.

If you would turn to page 12 at paragraph 49, in discussing the matter, part way into paragraph 49:

> "A finding of lack of independence or impartiality cannot be based on a cursory examination of the employment relationship or status."

In the case at hand there, the fact that Mr. Mak was employed by the prosecutor wasn't in itself determinative.

Then the court goes on:

> "Unless the court is satisfied that the witness is in a co-venture with the party, is currently in a position as an advocate for the party or has acted as advocate for the party on the same matter..."

And I stress that phrase:

> "...the court must test any perceived partiality through a voir dire hearing..."

And it goes on.

So, again, saying that even before you get into any kind of a weighing, if that's the situation, that the party has acted as an advocate on the same matter, then you don't even need to go to that step.

Now, the other case I've placed before you gives a more extensive examination of the history of this evidence, this particular area of evidence, law in Canada. I won't

take you through it all. This is the decision in the United City Properties and Tong, and the part that is relevant to our discussion today begins at page 9 under the heading "Impartiality and Expert Evidence".

I will just highlight a few of the paragraphs for you which I think might give you a taste of what the considerations there are. Here, again, there is a discussion of what process the court itself should follow in weighing this. At paragraph 37 on page 10:

> "Canadian trial courts have taken different positions on the issue of whether an expert witness's impartiality will disqualify him or her from giving evidence at trial. Some courts generally decline to exclude expert opinions on the basis that bias only affects the weight to be given to the evidence. Other courts have held that bias is presumed to inure to certain relationships, and when that is the case the evidence is inadmissible. Still other courts have favoured a factual inquiry into whether bias does, in fact, exist, and if so, whether it is of such a degree as to outweigh its probative value. In my view, the second and third approaches described are consistent with each other and are supported by statements from the Supreme Court of Canada as well as the rationale underlying the exception which allows expert opinion."

And over a leaf on page 11, there is a discussion of

the Fellowes and Kansa case, which the previous decision had mentioned. And there, the proposed witness had, in fact, acted for the insurance company in a related way earlier. And it notes:

> "The court granted the application to disqualify this expert, holding...that the expert having been hired as 'an advocate for Kansa's positions since he became involved in the matter', he did not meet the 'minimum requirement of independence.'"

And it notes it was varied on appeal, but on the basis of other matters. And, further, the decision goes on to canvass the earlier jurisprudence, and one of the early cases, English cases, the Ikarian Reefer case, is discussed at paragraph 42.

And the gist of it is:

> "An expert witness should provide independent assistance to the Court by way of objective unbiased opinion in relation to matters within [their] expertise... An expert witness in the High Court should never assume the role of an advocate."

At page 15, the bottom of page 15, the -- this is a BC Supreme Court decision, and it refers to the decision I took you to earlier, the Inco decision, at paragraph 53 there. And notice that that decision offers clarity on this issue, and at page -- the following page at paragraph 54 cites the paragraph I took you to, paragraph 49, in the

Inco decision, which refers to the -- which, again, mentions that unless the witness has been in the position as an advocate for the party, you would go into a voir dire.

So consistently the courts have held this notion that there is a very bright line at the outset if someone's been an advocate, puts them themselves into the position of being an advocate. You don't even get to the weighing. If that doesn't arise or if there is some uncertainty about that, you could then go to the second step of getting into a weighing, which in this case you would do in the ordinary course to determine what weight to be placed in the evidence.

At page 17, paragraph 58, the case of R v. J.-L.J., a Supreme Court of Canada case, is referred to there, in which the Supreme Court of Canada looks at the Mohan decision, the leading decision on courts dealing with such things, and talks about the gatekeeper role that the court should play. The -- excuse me.

The court here, BC court here, goes on in paragraph 60 to talk about the various precedents -- Klassen being one and Mohan being the other -- and notes in paragraph 60 that:

> "The Supreme Court of Canada has taken a more restrictive approach, more protective of the need to exclude suspect evidence."

It goes on at the bottom of page 18 to talk about some of the policy reasons why the courts and, I would argue,

the tribunals need to be careful here.

Obviously, in the case of a jury trial there is further complication of -- that you don't face here.

But they do note, for example, that it is obviously the question of whether the evidence will be of assistance, and it may be worse to introduce it then having no assistance, and that is something that needs to be looked at in the circumstances.

But also talking about the long-term effects of letting such evidence in or not, and the -- in a sense, the general deterrence value that the courts want to be careful to insist that experts be independent and make an effort to be independent and be seen to be independent, and that is the -- the situation that we are concerned with here.

So just briefly, then, going back to the letter of engagement, attachment 1 to L-4, schedule 5, we have a situation where certainly Mr. Luciani's firm -- and I take it that he didn't object to this arrangement, and as my friend's questions pointed out, apart from the section 2 of this letter of engagement, this does represent the basis of his engagement.

We have a situation where CRA has been prepared without -- as was indicated in the cross-examination -- without having looked into the specifics of OPG's case for CWIP. It was right away presumed to be engaged to develop third party expert report, quote, "supporting OPG's position," outlining a case for the inclusion of CWIP.

Now, we understand from this morning that they

didn't -- ultimately, were not engaged in the actual effort to go out and develop alliances with stakeholders, build support for OPG's position. But the fact that the firm was prepared to undertake that role at that stage -- which is outlined in sub (2) -- in fact, was offering advice to OPG that they must seek out potential allies who share its position, and prepare to bolster support for the recommendation, that they were prepared to do that. To go on record unabashedly saying they were prepared to do that is rather striking, and whether or not they actually were called upon to do that is, in a sense, irrelevant.

The fact that they were -- they were in that position, prepared to be in that position, suggests that this firm is not suitably careful about maintaining its independence, at least in this particular case.

And the Board should be most cautious with this evidence.

So in summary, I would suggest -- I would urge the Board not to allow this evidence in as expert evidence. It does not meet the test of independence as set out by the courts. It doesn't even meet -- it doesn't meet the threshold test, let alone whether it would meet the test on weighing.

If the Board does not choose that route, then certainly in a subsequent weighing, I would urge the Board to be extremely cautious as to what weight to be given to such a report.

MS. HARE: Mr. Poch, you referred to the -- at some

point, to the position of the courts and then you said: "and I suggest tribunals."

I would like to follow up on that point. Is there anything in the Statutory Powers Procedure Act which, one way or the other, would affect the admissibility of this evidence?

I know the question of weight is always a matter to be dealt with later. If we hear the evidence, the question of how much weight to give to it is another issue.

But I don't happen to have a copy of the Statutory Powers Procedures Act in front of me, but I wondered if there was anything in there that might be of assistance to us one way or the other.

MR. POCH: I am looking at my friends to see if anyone has one in hand and is more savvy on it than I am.

My understanding is that, of course, this tribunal follows the general rules of evidence. They apply to these tribunals no less than to a court, although certainly tribunals are the master of their own rules.

And this is a situation where you are going to have to exercise judgment as to whether the independence has been lost, and that is really a factual question.

And so there is no question you have complete discretion on that, on that issue.

I see my friend may be able to assist here.

MR. WARREN: I wonder, Ms. Spoel, if we could just take a moment and get the actual text of the Statutory Powers Procedure Act. I think it would assist us, if my

friend Mr. Millar says that the Rules of Practice are at hand. So if we could get it.

Thank you.

MS. SPOEL: I think that would be helpful.

[Mr. Millar passes document to Mr. Warren and Mr. Poch]

MS. SPOEL: We have actually managed to pull it up on the computer, so we don't need to -- perhaps we don't need to pass out copies of it, but if you have any comments that would be useful...

MR. POCH: I am going to pass this off to my friend.

MR. SMITH: I will ask my friends to hand it down to me, but my recollection is that the SPPA says that you are not bound by the rules of evidence in the same way as the court.

MR. POCH: I would refer the Panel to section 15 of the Statutory Powers Procedure Act, which sets out the rules on evidence in this regard. Obviously, it doesn't speak to the particular question of independence, but...

MS. SPOEL: I guess you don't have anything helpful to add?

MR. POCH: Well, other than the -- there is an analogy there, that they deal specifically with the question of admissibility of privileged material, and make note that nothing is any more admissible in this venue than it would be in a court, where that question arises.

Further, that where there is any Act that limits admissibility of evidence, it is no more admissible in the

administrative law setting than in the courts.

MS. CHAPLIN: All right. Are there any other parties that wish to speak?

SUBMISSIONS BY MR. WARREN:

MR. WARREN: May I just briefly, Madam Chair?

As I am sure the Board members will be aware, the question of the independence of experts took on a very considerable urgency and was the subject of considerable public discussion as a result of the nefarious acts of the former Dr. Smith, who was the Coroner for the Province of Ontario and was the subject of Justice Goudge's inquiry. And, as a result of Justice Goudge's inquiry, there has been a renewed focus on two things.

One is the critical importance of the independence of experts, and a renewed focus on the function not just of the courts, but of regulatory agencies, as gatekeepers.

If you look - and I would invite you to look - at the question of why this evidence is being tendered. The evidence is being tendered in order to give it additional weight and to give it weight arising from its independence, that it speaks to something which OPG could not, of its own accord, do.

There is absolutely nothing, I say with respect, in Mr. Luciani's evidence that could not have been assembled by Mr. Barrett and his team; nothing.

What Mr. Luciani's pedigree attaches to the evidence is a bona fides that arises ostensibly from his having looked at this independent of the interests of OPG. It is

clear from the portions of the retainer letter that my friend, Mr. Poch, has brought to your attention, is that Mr. Luciani is not an independent expert. He is dressed up as one. He is really an advocate for a certain position.

And when he is an advocate, the Board should not, I say with respect, admit him as an expert. That is the proper exercise of the Board's function.

Now, to go to Ms. Spoel's question, I think it is generally assumed from the text of the Statutory Powers Procedure Act that there is a reduced standard in regulatory proceedings, in administrative law proceedings. I say, with respect, that in this case it is so clear that this man is an advocate and not an independent expert that this -- that even though lower standard applied by regulatory agencies should not be applied; that Mr. Luciani should not be admitted as an expert.

Those are my submissions. Thank you.

MS. CHAPLIN: Mr. Shepherd?

SUBMISSIONS BY MR. SHEPHERD:

MR. SHEPHERD: Thank you, Madam Chair. I just have two points. The first is I guess we're a little more cynical about whether experts are actually independent, and normally when you are appearing before a court, the court has to be somewhat careful, do a voir dire, et cetera, to test independence.

In the case of a regulatory tribunal like this, you are specialized in your field and, as a result, you have a better sense of whether you are hearing biassed or

independent information already.

And often you know the experts. You have been on the other side, having hired experts just like these. So you know the natural bias that comes with experts who always appear for the utilities, for example, or experts who always appear for the intervenors, and there is a certain amount of weight that -- weighing that goes on there just because you are specialized regulators. That is perfectly normal, and the system adapts to that.

In this case, we're dealing with a more overt bias, and, at the most extreme, it would be: You are only paid if we win.

And I think everybody in this room would agree, if it was you are only paid if you win, then that is not an expert. They're not independent.

So the question is: What if the retainer is, We are hiring you to support our position, which is what is the case here? It is crystal clear from the retainer letter. We are hiring you to support our position.

So is that far enough for you to say, No, you are obviously not independent. You are hired to be an advocate, and, therefore, you are not adding any value to the process.

My own view is that that crosses the line, but I am not sure it is as bright a line as Mr. Poch suggests.

That leads to the second question, though, and that is you obviously can just take this analysis and use it to determine how much weight you give to Mr. Luciani's

evidence.

The problem is that people appear before you in only two roles. One is they have knowledge of the facts on which the disputes or the issues in this case are based. Mr. Barrett, for example, is here in that category. He's not here as an expert. He is here because he has information to give you that he knows.

Mr. Luciani is not here in that capacity. He has no direct knowledge of this case. What he has is an expertise. So the question is -- if his only value to you is as an expert, then you have to ask yourself, if his expertise is tainted by bias, then what good is -- and I don't mean this in a pejorative way, but what good is it to hear from him? What value is he bringing to the process if you can't trust his independence as an expert, because he doesn't have anything further to give you?

Therefore, I agree with Mr. Poch. It seems to me that Mr. Luciani is not an appropriate expert to be brought here.

And I should add one thing. Mr. Barrett probably has at least as much expertise in regulatory matters as Mr. Luciani. And the only difference between Mr. Barrett and Mr. Luciani is Mr. Barrett works for OPG. Otherwise, he could give exactly the same evidence. In fact, if he left OPG, he could be a consultant and tomorrow be at the FERC saying the same things that Mr. Luciani can.

So we can hear everything that Mr. Luciani would say from Mr. Barrett, and you would see the context in which it

is being given to you.

Those are our submissions.

MS. CHAPLIN: Mr. Smith.

MR. MILLAR: Madam Chair, if I may -- Michael Millar. I am not sure you want to hear from me. I have some very brief comments, but I think it would make sense if I went before Mr. Smith.

MS. CHAPLIN: Certainly.

SUBMISSIONS BY MR. MILLAR:

MR. MILLAR: Much of what I had intended to say has been covered. I confess I haven't looked at this issue in detail in a number of years.

I have reviewed Mr. Poch's cases. I don't doubt that is the current state of the law. But to follow up on Ms. Spoel's point, I do note both the cases themselves are court cases, and, indeed, unless I am mistaken, all of the cases referenced therein are also court cases. There don't appear to be any cases specifically relating to a tribunal in this context.

As I think we can all agree, looking at the SPPA and the Board's Rules of Practice and Procedure, the rules of evidence are more forgiving for tribunals than they would be in a court setting. But I do want to add that the rules of evidence exist for a reason, and we only part from them with good reason, would be my submission.

So subject to any questions, I think everything else I intended to say has been covered.

MS. CHAPLIN: Thank you.

Mr. Smith.

SUBMISSIONS BY MR. SMITH:

MR. SMITH: Thank you, Madam Chair. I would like to just start off just by reviewing, I think, a couple of points in the legal framework, and then getting into the evidence, because, ultimately, despite my friend's submissions, this matter has to be determined on the law and the evidence. And, in my submission, the evidence gets my friends nowhere in support of their position.

So as a legal matter, just procedurally, my friend Mr. Poch is incorrect, in that we are in a voir dire now. That is exactly what is happening here. If my friend had wanted to move on the basis of the evidence itself and found it objectionable on the face, he could have done that, elected not to do it. He decided to cross-examine and, in my submission - I will come to it - got nowhere on that point. So we are in the voir dire.

With respect to the law, I agree with Mr. Millar, in that the SPPA does deal with this situation and that we are dealing with a relaxed standard. I don't rely on that necessarily, however, in that I think even if this were a court proceeding, my friends would not meet the relevant standard for the exclusion of opinion evidence.

I say that, because if you look at what my friends -- the cases they've -- Mr. Poch brought to your attention and the considerations in that case, what is important for this tribunal to look at is the particular employment -- the particular expert who is testifying and his or her

relationship to the evidence.

It's not a generic retainer letter, is not the standard, any more than in the Inco case the fact of employment was enough to disqualify the expert. And I would observe that in both cases my friend put forward - and, in my submission, far more apparent situations - the evidence was admitted.

So in the Inco situation, you had a representative of the Crown who testified only for the Crown on a number of occasions. I think it was 15 times. And the court, on appeal, said that was not sufficient to exclude the evidence. In fact, we needed to look at the evidence itself and the particular facts relating to this witness, and his or her partiality or independence.

The evidence was admitted.

In the BC case, what you had there were two architects, two architects who had been retained on behalf of the party to advance their position. The suggestion was made that they were not independent. Ultimately, the court's determination was to the contrary, and their evidence was admitted.

With respect to my friend's submission about the RJ and LJ case, he took you to paragraph 60 of the British Columbia case, but he didn't take you, first, to paragraph 58. It is important to understand the context, and this bears on what my friend Mr. Warren said.

Mr. Warren raised the spectre of the infamous Dr. Smith. Well, obviously we are not in that situation, but

one thing that is worth bearing in mind is this situation is of most concern in criminal matters, when someone's life is in jeopardy. We are obviously not in that situation.

And the concern that was articulated in the R. v. J.-L.J. case was with respect to junk science. And that is the Mr. Smith example -- no relationship -- the Dr. Smith example.

[Laughter]

MR. SMITH: Where they were talking about -- it's always the Smiths -- they were talking about the trial judge's gatekeeper function vis-à-vis experts in the context of novel scientific evidence.

What the Supreme Court of Canada was concerned there with were people with impressive credentials showing up, putting forward a view that was actually not supported by scientific literature and repeatable. And the concern they articulate is:

> "If trial judges begin admitting this, then they allow the experts proposing the novel science to use their role."

Nobody is suggesting that that is happening in this case. And in my submission, there is absolutely no parallel. In fact, the case doesn't help my friends at all.

What you need to do, in my submission, is look at the evidence. No doubt, my friend was hoping on the retainer level to establish that there had been some sort of advocacy by Mr. Luciani on behalf of OPG. That is not the

evidence in this case.

He prepared a research report. He has done no other work for OPG. And he is here to testify in respect of that.

And while my friend's point to part of the letter in my submission, the most important part of the letter has been ignored. It is the end of the letter, page 4, top paragraph:

> "CRA will offer independent, objective opinions and analysis."

Nobody cross-examined Mr. Luciani and suggested that his opinion was other than independent or an objective analysis.

In my submission, if that is the position they want to take, they have to put it to him and allow him to respond to it. Nobody did that. And in my submission, there is no basis for the proposition that he is other than independent.

As I understand at least Mr. Poch's submission, that is the only basis for his objection. He does not object to Mr. Luciani's qualifications otherwise to provide independent -- sorry, to provide assistance to this tribunal.

The evidence of Mr. Luciani, he is obviously qualified. He has written a report. He is not paid other than in a normal way to provide that report and to testify today, and he has done no other work.

And in my submission, his position is no different --

whatever the retainer says -- than anybody else who was called, and certainly no different than anybody who testifies, for example, on the numerous consultation processions that the Board undertakes and subsequently testifies in later proceedings.

If we were disqualifying people on the basis my friends suggest, you could never have a witness testify in the Board's cost of capital generic proceeding and subsequently at a utility rate proceeding. That would be the effect of my friend's position. And in my submission, that is obviously not the practice this Board has followed.

I would also say, with respect to independence, that the usual indicators of lack of independence are not present here, in that Mr. Luciani specifically indicated he has testified for utilities, customer groups, and for regulatory commissions, as well. So he has covered the spectrum on that front.

With respect to Mr. Warren's submissions and Mr. Shepherd's submissions about the report and whether or not -- I suppose what they're saying is whether or not the report is necessary. In my submission, again, their position needs to be founded on the basis of evidence. And if they had wanted to put the proposition that there was nothing in Mr. Luciani's report or the testimony he is offering today, then they could have cross-examined him on that to establish it.

Mr. Shepherd baldly asserted that Mr. Barrett could just provide all of the same testimony. He didn't ask any

questions to that effect. And if he wanted to make that submission, he needed to have asked questions to establish that.

In my submission, there is good reason why Mr. Poch didn't say it, because he plans on calling Mr. Chernick on Monday, who would be, presumably -- Mr. Shepherd's submissions would apply to him as well. If I want to take that position, obviously I will have to ask questions to establish that. You cannot just simply assert this person doesn't have expertise, exclude them without any evidentiary foundation.

So in my submission, there is no basis for my friends' motion to exclude Mr. Luciani, and he should be admitted.

And at the end of the day, this Board, having heard the evidence, will attach the weight that it feels is appropriate, as it does in every other situation.

MS. CHAPLIN: Mr. Poch?

FURTHER SUBMISSIONS BY MR. POCH:

MR. POCH: Just to say that I don't really understand my friend's point that you couldn't have a witness testify who -- as an expert who has previously testified in or participated in a consultation.

The fact that a prior proceeding was informal or formal is irrelevant. You hear witnesses all the time who have testified in prior proceedings before you, or before other tribunals, and have taken a position. That alone does not constitute bias.

You have heard the distinction my friend Mr. Shepherd

made. Yes, we do appreciate that experts tend to fall into camps. They have theories, and obviously, parties select experts who come from a camp where they are not philosophically opposed to the goal of the intervenor, but that is very different than what we're talking about here.

MS. CHAPLIN: How is it different?

MR. POCH: The question is whether the expert is -- puts themselves, puts -- wears the mantle of advocate or is prepared to wear the mantle of advocate or not. An expert, to be an independent expert, may have a view. That view may be known in advance, but the point is the expert has a duty to you, to the decision-maker, to be objective, to acknowledge both sides of an issue.

And where an expert, as here, where the organization has said, before getting into the specifics of the facts at hand, says: We're going to -- we will write a report to support your position, that, to me, is -- in that case is a complete prejudgment of the facts and issues at hand in the particular proceeding. And the fact that the witness is also prepared to -- prepared to advocate amongst other parties is exactly the role that compromises that ability for an expert to maintain any independence and objectivity.

MS. CHAPLIN: Should we be making any distinction between Mr. Luciani, who appears before us, and his specific role as an individual? Because you seem to be drawing -- having us draw the conclusion from what is contained in a section of this letter, which was not signed by him and which he has also testified that he took no part

in.

Your view is that that is not a distinction?

MR. POCH: I don't believe it is, for two reasons.

First of all, he was explicitly asked by my friend whether or not this letter, apart from the second section, is reflective of his understanding of his retention, and he said yes. So right away we have paragraph 1 is still applicable.

But secondly, in a small consulting firm or whatever size it may be, when the vice-president says: Here's what we're prepared to do for you, and I am going to assign someone to do it, I don't think we should start then going behind that and enquiring into the -- it would be a very difficult exercise to parse distinctions.

I think the presumption arises, and it has not been rebutted.

MS. CHAPLIN: Then with respect -- so setting aside section 2, the other part you are particularly drawing to our attention is the very first paragraph, I believe; is that correct?

MR. POCH: Yes. The fact that -- and I did question him on this -- that had their firm inquired into the specifics of the applicability of CWIP to OPG's situation before agreeing. The indication was they had not done such work.

Yet they were, right at the outset, prepared to say they were prepared to write a report supporting, and --

MS. CHAPLIN: Would that bear any relationship to the

point I believe you made earlier, which is that certain experts are known to have a particular view? If he was known -- if their firm was known to be supportive of CWIP, would that have been a factor?

MR. POCH: He would have an obligation as an expert to say, I'll look at the facts. You know, I may have a view that, in general, these things are good.

But you have to look at the facts in certain situations of a case before -- unless, you know, the position is that there can never be a case which CWIP isn't applicable. I don't think you will find an expert that would go that far.

So I think there is quite a distinction to be made there.

MS. CHAPLIN: So the fact that they are in advance committing to support a particular position?

MR. POCH: Yes.

MS. CHAPLIN: Okay. I'm sorry, did you have anything further?

MR. POCH: No. You know, I do say, although we've heard that they didn't go on to conduct this development of alliances, the fact that they were also prepared at that stage -- the organization was also prepared at that stage to put themselves in that role to bolster support, I think is extremely telling about what the attitude of this firm is to the work they do as experts, their understanding of that role, which is startling.

MR. WARREN: Madam Chair, I apologize. This is a

terrible oversight on my part. There is a portion of my argument which I forgot to raise and which Mr. Smith should have an opportunity to respond to. I know it is late in this long process, but I wonder if I could briefly raise the point now, as it is germane to the issue of whether or not all -- if you are going to admit the expert report, whether you should admit all of it.

MS. CHAPLIN: Okay, go ahead.

FURTHER SUBMISSIONS BY MR. WARREN:

MR. WARREN: Briefly, Madam Chair, if I could ask you to turn up the report itself, sections 5 and 6 of the report. Reduced to their essence, what Mr. Luciani does in paragraphs 5 and 6 are to apply the criteria in the Board's report, which I am going to crudely refer to as the CWIP report, because I don't remember its -- it the report of the Board on regulatory treatment of infrastructure.

What Mr. Luciani does in 5 and 6 is to apply those criteria to the Darlington refurbishment. In other words, Mr. Luciani provides an opinion on the very issue that you have to decide. And I think Mr. Smith and I would agree that any way you slice it, that is inappropriate for an expert to do. That is not the expert's function, to usurp your role, in providing an opinion on that.

So if the Board is to accept Mr. Luciani as an expert and to admit this report, I would ask the Board to strike sections 5 and 6 of his report. I apologize for not getting that to you earlier.

MS. CHAPLIN: Sorry, Mr. Warren. You're saying

because he reaches a conclusion and a recommendation, that that is -- in what way is that inappropriate?

MR. WARREN: He is usurping your function. It is your function, one of the many functions you have to fulfil in this case, to decide whether or not the criteria for the application of -- or the approval of CWIP to a particular project has been met in this case.

It is not the expert's function to usurp your role by giving an opinion on that very question. It is the equivalent of an expert giving an opinion that a particular person charged with an offence is guilty of the offence. That, an expert is not entitled to do.

MS. CHAPLIN: Let's side aside the criminal analogies for a moment. How can I distinguish that from, for example, Drs. Kryzanowski and Roberts, who make a recommendation as to what the capital structure is to be?

MR. WARREN: Well, in this case, what this particular witness is purporting to do is to apply the criteria that are in this report. That's the very issue that is before you.

MS. CHAPLIN: Okay. Mr. Smith.

FURTHER SUBMISSIONS BY MR. SMITH:

MR. SMITH: Well, your question is apposite, in that it is no different from what Drs. Kryzanowski and Roberts did, and my friend is referring to an old doctrine of experts not being permitted to testify is the ultimate issue.

Firstly, I would say this is not the ultimate issue

you need to decide. But, in any event, it is actually no longer the law. I don't have the benefit, because I didn't have my friend's submission in advance -- but I do know that the case that I referred to earlier, the R. v. J.-L.J. case, actually deals with this issue.

The court does deal with this proposition, and my recollection, at least, is that the court has found that over the years, that that requirement has been greatly relaxed and the ultimate -- the issue, ultimately the court went on to exclude it on the basis of the junk science.

But, in my submission, it is absolutely no different than the situation you regularly have before you. Experts come and they provide a ready-made inference: Here's the understanding with respect to CWIP. Here's what I understand to be the Board's criteria.

And, indeed, it is the very testimony Mr. Poch intends to lead on Monday.

MS. CHAPLIN: All right, thank you. We will break now for 30 minutes.

--- Recess taken at 10:19 a.m.

--- On resuming at 11:05 a.m.

MS. CHAPLIN: Please be seated.

DECISION:

MS. CHAPLIN: The Board has its decision in the matter raised this morning by GEC.

GEC seeks to exclude the evidence of Mr. Luciani on the basis that he is not independent. GEC relies on the CRA retainer letter as evidence that the witness is not

independent.

The retainer letter does give the Board some concerns.

However, given that OPG was intending to propose CWIP treatment, it is not surprising that it would select a consultant which supports the inclusion of CWIP in rate base.

As a regulatory tribunal, the Board has significant latitude to admit evidence and determine the appropriate weighting.

The Board has decided to admit the report in its entirety and to hear the testimony of Mr. Luciani. In particular, the Board wants to understand how CWIP is applied in other jurisdictions and the circumstances in which it is allowed.

We will take the retainer letter into account when weighing the evidence.

Subject to any questions, we can proceed.

MR. SMITH: No questions. I think I should formally go through the step of having the evidence adopted for the purposes of the proceeding and the interrogatories, so I will ask if I could just ask that question before he is tendered for cross-examination.

MS. CHAPLIN: Certainly.

MR. SMITH: Mr. Luciani, the report at tab D-4 -- sorry, at D-4, tab 1, schedule 1, was that prepared by you, or under your supervision?

MR. LUCIANI: Yes, it was.

MR. SMITH: And do you adopt it for the purposes of

testifying today?

MR. LUCIANI: Yes, I do.

MR. SMITH: And similarly, interrogatories asked in respect of that report, were those prepared by you or under your supervision, the responses to interrogatories?

MR. LUCIANI: Yes.

MR. SMITH: Do you adopt those for the purposes of testifying here today?

MR. LUCIANI: Yes, I do.

MR. SMITH: Thank you.

I have no questions in examination-in-chief, Madam Chair, so I will make the panel available for cross-examination.

MS. CHAPLIN: Thank you, Mr. Smith.

Mr. Stephenson?

MR. STEPHENSON: Thank you, Madam Chair.

CROSS-EXAMINATION BY MR. STEPHENSON:

MR. STEPHENSON: Panel, my name is Richard Stephenson. I am counsel for the Power Workers' Union.

Madam Chair, I distributed by e-mail a couple of days ago two documents, and I've got some hard copies available here today.

I would like to ask the panel some questions about them, and maybe I can get them marked as exhibits.

MS. CHAPLIN: Certainly.

MR. MILLAR: Yes, Madam Chair. The first one is a PWU table:

"Cost recovered from ratepayers under proposed

CWIP, and current regulatory treatment."

We will call that -- Ms. Binette has already numbered them, so this will be K13.4.

EXHIBIT NO. K13.4: SPREADHSEET ENTITLED "COST RECOVERED FROM RATEPAYERS UNDER PROPOSED CWIP, AND CURRENT REGULATORY TREATMENT."

MR. MILLAR: And K13.3 will be a document entitled "Rating North American energy utilities: electricity, natural gas and pipelines." Again, that is K13.3.

EXHIBIT NO. K13.3: DOCUMENT ENTITLED "RATING NORTH AMERICAN ENERGY UTILITIES: ELECTRICITY, NATURAL GAS AND PIPELINES."

MR. STEPHENSON: Thank you. Panel - I think actually this is for you, Mr. Barrett - if I can just take you to the spreadsheet document, K13.4, let me just tell you what this is and then I will ask you my question.

What we have done is taken the answer to an interrogatory which was provided by OPG. It is to VECC Interrogatory No. 4. It is L-14-4 on Issue 2.2.

You are familiar with that interrogatory response, are you?

MR. BARRETT: Yes, I am.

MR. STEPHENSON: Okay. And what you will see that we've done is just made one small modification to the answer that you have provided, which is to add, in each of the illustrative examples, a cumulative column, which we have called -- it is column 1A, and column 3A.

Do you see that?

MR. BARRETT: Yes, as well as 2A and 4A?
MR. STEPHENSON: And 2A and 4A. You're right.
And can I just ask you, subject to check, that the math -- we've done the math right?
MR. BARRETT: Subject to check, yes.
MR. STEPHENSON: Okay. And then the second thing that we've done is on the second page of the document, is create a couple of smaller tables where we have divided up the 39-year period of recovery that you provided in your illustrative example, into three 13-year periods.
Do you see that?
MR. BARRETT: I do.
MR. STEPHENSON: And I would just ask -- again, subject to check -- if we've done the math right.
MR. BARRETT: Subject to check, it looks correct.
MR. STEPHENSON: Okay. The next -- and I am not sure if this is for you, Mr. Barrett or not -- but if I can take you to the other document I provided, which is K13.3, a DBRS document.
Do you have that?
MR. BARRETT: I do.
MR. STEPHENSON: Okay. Had you seen this document before we provided it to you?
MR. BARRETT: No, sir.
MR. STEPHENSON: Okay. I take it you know who DBRS is?
MR. BARRETT: I do.
MR. STEPHENSON: Do they rate OPG's debt issues?

MR. BARRETT: They do, and there is a DBRS report that is filed in evidence.

MR. STEPHENSON: Right. In any event, I take it you are familiar that this outfit from time to time issues reports like this?

MR. BARRETT: I am.

MR. STEPHENSON: Okay. And can I just take you to page 9 of the document to start?

And you will see what they're doing is they're describing their rating methodology; is that a fair comment, in terms of what the document is doing, generally speaking, in terms of electric, natural gas and pipeline utilities? Fair?

MR. BARRETT: Yes, I think that's fair.

MR. STEPHENSON: Okay. And you see starting at page 9, the heading is: "Industry specific factors"?

Do you see that?

MR. BARRETT: I do.

MR. STEPHENSON: And then towards the bottom, there is a section called "Primary factors"? Do you see that?

MR. BARRETT: Yes.

MR. STEPHENSON: Okay. And the first one they talk about is regulatory contractual. And I am interested in the second one which is starting on page 10, which is under the heading: "Capital spending." Do you see that?

MR. BARRETT: Yes, I do.

MR. STEPHENSON: And if I can just take you -- direct you to -- actually, let me just take you to the first

paragraph under that, where it indicates that:

"Energy utilities are capital-intensive businesses. An energy utility might undertake large capital projects in order to either meet growing demand in a high-growth franchise area or to significantly refurbish aging assets. This could potentially lead to cost overruns and weaker financial metrics, at least during the growth phase."

Do you see that?

MR. BARRETT: Yes, sir.

MR. STEPHENSON: I take it that is a comment which is relevant to OPG's business; is that fair?

MR. BARRETT: Absolutely.

MR. STEPHENSON: In the next paragraph, the DBRS goes on to say:

"All things being equal, a large multi-year growth project would likely entail more execution risk and credit metric deterioration than a small project with a shorter construction period."

Stopping there, I take it that that is a fairly logical bit of analysis that you would agree with?

MR. BARRETT: Yes, I think it's fair.

MR. STEPHENSON: Carrying on:

"For larger multi-year projects, credit metric deterioration is largely attributable to the fact that while debt would typically be used (at least partially) to fund expenditures, cash earnings

are generally not realized until the assets are placed in service."

Again, I take it that is, generally speaking, the current kind of regulatory treatment that OPG faces?

MR. BARRETT: That's right. It's a generalized concern, and it is a concern that the Board itself noted in its infrastructure report.

MR. STEPHENSON: Carrying on, DBRS says:

"Therefore the existing asset base must produce the cash required to service the incremental debt associated with the new assets until those assets are placed in service."

Again, that's, I take it, the circumstances that would face OPG on the current regulatory treatment?

MR. BARRETT: Yes, unless we received CWIP.

MR. STEPHENSON:

"If construction-related interest expense is capitalized, this can understate an entity's interest expense on the income statement as the capitalized portion is removed to arrive at the net interest expense."

Let me stop there. Again, let's assume for a moment that we're talking about circumstances where your CWIP proposal is not yet approved. Is that an accurate statement vis-à-vis how your -- how OPG would reflect these expenses on its income statements -- in its financial statements, rather?

MR. BARRETT: Yes. Our proposal is to capitalize the

Darlington refurb expenditures.

MR. STEPHENSON: Just stopping there, is the commentary expressed here -- are you familiar with this kind of analysis, this kind of commentary, amongst the people -- the credit rating community on this issue?

MR. BARRETT: Yes. I've seen other reports that have talked about this issue, along similar lines.

MR. STEPHENSON: And to the extent that your proposal is adopted - that is, the CWIP in rate base proposal is adopted - how, if at all, does it address the issues that are raised in that paragraph?

MR. BARRETT: If it was adopted, it would provide additional funds for the company, and, therefore, you wouldn't have the same deterioration and credit metrics that is referenced in that paragraph during the period prior to the asset coming into service.

MR. STEPHENSON: All right. And let me just deal with the potential impact on the credit rating issue, more generally, and the implications of either the acceptance of your proposal or the non-acceptance of your proposal.

Your proposal, obviously, at least for the purposes of this application, is focussed on the Darlington project costs, specific ones that you have identified, but it is in relation to Darlington; correct?

MR. BARRETT: Yes, as we proposed it in this case, although I think in response to an interrogatory we reserved the ability to bring it forward in respect of other projects, if we thought those projects met the

Board's criteria.

MR. STEPHENSON: Right. Let's assume that -- assuming that the Board approves your request, do you have -- what is your information or understanding regarding the effect of that approval with respect to OPG's credit rating on a go-forward basis relative to where it stands today?

Is it -- directionally, does it have the effect of making it better than it is today? Is it making it the same as it is today, or is it not as good as it is today, shall we say?

MR. BARRETT: It will certainly help. If we don't get it and we'd proceed with this project, as is our plan, we expect some impact on our credit metrics.

And if I could just turn to -- I did pull out a little bit of an excerpt from the DBRS report that is in evidence, and I note that they express some concerns about some of our financial metrics, particularly looking forward.

This can be found at Exhibit A2, tab 3, schedule 1, and it is attachment 1. I think the two places where it is useful to look is at page 7 and page 8 of that report.

So if you look at page 7, there is a section right at the top that talks about their outlook for OPG. And in the second paragraph, they talk about the fact that:

> "Interest expense is expected to increase in the medium term, given the debt financing required to fund the increased capital expenditures; therefore, coverage ratios will weaken slightly. Furthermore, should the nuclear refurbishments

and nuclear new-build generating projects be approved, the Company will witness a substantial increase in interest expense as the projects are significant in size."

So you can see there they're echoing those same concerns.

And if you turn over the page to page 8, again there is a section that is marked "Outlook". I won't read it all, but if you look at the second paragraph in that section, again they're talking about this credit metric issue, and at the end of that paragraph they say:

"As debt is added to fund capital expenditures, credit metrics would be expected to decline from current levels as assets do not generate earnings or cash flows until placed in service. Once in service, metrics would be expected to improve."

So, again, I think there's the same kind of concerns that we saw in the generic document that they've expressed with reference to OPG's particular situation.

MR. STEPHENSON: Okay. I just want to address this issue about the relative outcomes; that is, if you get it and if you don't get it.

Is it fair to say that your concern is, vis-à-vis in the future, that, directionally, if you don't get what you are asking for, there is a risk that your metrics will be worse and therefore -- your credit metrics will be worse and that will flow through into decreased or worse ratings? That is the risk?

MR. BARRETT: Yes, and higher interest costs as a consequence.

MR. STEPHENSON: But I take it -- do you have a view or have you formed a view regarding the situation, relative to your metrics, your present credit rating? That is, you have indicated a risk that compared to if you do get what you were asking for versus you don't get what you are asking for. If you do get what you are asking for, you will be better off from a credit perspective, but where does it stand relative to where you are today? Do you have a view about that?

If you get what you are asking for, are you net better than you are today, about the same or worse?

MR. BARRETT: Yes. We would be better if we got CWIP relative to the alternative case.

MR. STEPHENSON: That is not my question. I got that answer.

You haven't got the project -- you are not doing the project today in any material way, and so you don't have these expenses today?

MR. BARRETT: I am not sure I would agree with that. We are proceeding with the Darlington refurbishment project. We are committed to that project and we expect it to proceed, and we are spending money today in respect of that project.

MR. STEPHENSON: Of course you are right about that. I apologize. I have asked the question poorly.

If we step back a period of time, whether it is -- to

a point in time where you weren't spending money on this Darlington project, if that is in 2009 or 2008, and that's where I want to -- I want to get the comparison between a situation where -- does getting CWIP -- here is the bottom line of my question.

Does getting the CWIP protection in rate base, when you are doing the project, keep you the same as where you were at before you started the project?

MR. BARRETT: I think that remains to be seen. We haven't gotten -- we haven't gotten the decision from this Board first in terms of our proposal, and we haven't gotten the reaction from the rating community as to what they will decide based on that decision, the Darlington refurbishment project, and other things that are going on within the company.

It's our expectation that if we don't get CWIP, things will be worse. We don't know how much worse. And, again, that remains to be seen.

MR. STEPHENSON: Right. Just to be clear about that, things will be worse not only relative to the situation that would be in place if you got CWIP approval, but they would -- but your expectation is they will be worse even relative to where they stood say in 2009?

MR. BARRETT: I am not sure I have enough information to agree with the second part of that. I certainly agree with the first part of that.

MR. STEPHENSON: Okay. Thank you.

Those are my questions.

MS. CHAPLIN: Thank you, Mr. Stephenson.

Mr. Pui, do you have any questions?

MR. PUI: Yes, I do.

MS. CHAPLIN: Please go ahead.

CROSS-EXAMINATION BY MR. PUI:

MR. PUI: My name is Stan Pui. I represent the Society of Energy Professionals.

My question relates to -- I am just going to have some preamble here. I just want to confirm that the Pickering continued operation essentially ends at 2020, removing approximately 3,000 megawatts of base load capacity from Ontario; is that correct?

MR. BARRETT: Yes, that's our plan.

MR. PUI: Okay. Then for Darlington refurbishment, essentially, if it goes through, will place 3,600 megawatts of capacity with basically staggering -- stagger finally in-service dates up to 2020; is that correct?

MR. BARRETT: No. The in-service dates go beyond 2020.

MR. PUI: Okay.

MR. BARRETT: I think the last unit, subject to check, comes back into service in 2024.

MR. PUI: Okay. Now, an earlier statement that was made that OPG -- in terms of the Darlington refurbishment represents the best alternatives, economic alternatives amongst all of the other alternatives for the ratepayer, and OPG would likely proceed with or without CWIP; is that correct?

MR. BARRETT: I would say two things in response to that.

One, it is certainly our view that it is the best base load alternative available to the province. And we see that the OPA agrees with that assessment, based on our LUEC calculation.

And we are going to proceed with the project, as we have indicated in response to an interrogatory, whether or not the CWIP proposal is approved or not.

MR. PUI: Now, in terms of funding, like, funding for specifically Darlington refurbishment, are the other funding alternatives being -- have been examined to progress this project, other than CWIP? Like, have you looked at that?

MR. BARRETT: I think the evidence that was put in earlier is that we are assessing where the funding will come from, and we don't know at this point all of the sources.

MR. PUI: Okay. Now, in terms of -- just based on the public information that is available out there, now, Bruce Power refurbishment, is that a -- they're a private company, obviously, so they're essentially unregulated; is that correct?

MR. BARRETT: They are unregulated, that's correct.

MR. PUI: Also in the public record that the plan unregulated electricity capacity has been brought on-stream going forward. Typically, in your opinion, is the minimum contract price above the market price?

MR. BARRETT: Absolutely. I don't know if there are any generators, other than our own unregulated hydroelectric, that are delivering power into Ontario on the basis of the HOEP or the market price. That's no indication, in any respect, of the cost of generation in this province.

Bruce Power has a contract for their output with the Ontario Power Authority.

MR. PUI: Typically, for all of the other unregulated electricity capacity that is being brought on stream, are they typically, again, above the -- your minimum contract price, is that above the market price?

MR. BARRETT: It is certainly above the market price now, based on my understanding of the public information.

MR. PUI: All right. So I am going to extrapolate a little bit about the impact of CWIP.

Now, if we initiate CWIP now, would it actually reduce the probability that the 3,600 megawatts of Darlington capacity becoming unregulated, thus further driving up the overall costs for the ratepayers?

What I'm saying is that one of the alternatives that potentially could occur is that the -- given the lifespan of Darlington at this point, it will end some time in the 2020, 2024, based on whichever dates you have.

After that, essentially, that's really new capacity that is going to be brought on-stream. So if we don't fund it now, is your risk that that capacity will become unregulated, and thus as a result of that, further drive up

in the long run the costs for the ratepayers?

MR. BARRETT: I have no information that would suggest that that capacity would become unregulated.

The capacity is regulated pursuant to a government regulation, so the government would have to decide to change that regulation, and remove the Darlington facility from the list of prescribed assets.

But I have no indication that that is intended.

MR. PUI: That ends my questions. Thank you.

MS. CHAPLIN: Thank you, Mr. Pui.

Mr. Poch, I believe you are next. I think you switched spaces with Mr. Shepherd.

MR. POCH: Yes. Thank you, Madam Chair.

MS. CHAPLIN: Okay. Please proceed.

CROSS-EXAMINATION BY MR. POCH:

MR. POCH: Did I understand your answer correctly, a minute ago, Mr. Barrett, that you don't yet know where the funding will come from for the Darlington refurbishment, assuming it proceeds?

MR. BARRETT: That's right.

MR. POCH: I take it there are possibilities other than going to the market in the ordinary course? There's a possibility of...

MR. BARRETT: There would be a range of possibilities, and the most likely is that we would secure financing from the OEFC, as we have in respect of other projects.

MR. POCH: That being the case, it is quite possible, is it not, that CWIP would not make any difference to the

costs of that borrowing, to the real costs of that borrowing?

MR. BARRETT: No, that's not correct. Our evidence in the last case and in this case is that we get funding from the OEFC on the basis of market rates. They want to make sure there is no subsidy in the provision of that debt.

So our credit metrics would impact the cost of that borrowing.

MR. POCH: All right. Now, the Panel, in allowing Mr. Luciani's evidence in, indicated it had a particular interest in learning about the treatment of CWIP in other jurisdictions.

Am I correct from the answer to L-2, schedule 6, answer (c) -- I am not sure you need to turn it up -- but that, Mr. Luciani, other than the specific cases you mention in your report, you have not examined the treatment of CWIP in other U.S. jurisdictions?

MR. LUCIANI: As far as explicit testimony on CWIP issues, I have not. I dealt with stranded cost recovery in the --

MR. POCH: No, that is not my question, sir.

MR. LUCIANI: Stranded cost has to do with CWIP and the transition of construction work-in-progress from a regulated rate base to a deregulated rate base.

So I am dealing with CWIP. And of course, I dealt with the CWIP modelling as part of the DOE, potential DOE-supported financing of the Duke nuclear plant.

MR. POCH: My question -- I think we're passing ships

here -- my question was -- the answer there indicates you looked at some specific examples of CWIP decisions to inform your report, and the ones that are noted there.

I took that answer -- maybe we should turn it up -- to say that you had not looked at the rationale of regulators in those jurisdictions where -- the many jurisdictions where they rejected CWIP; is that correct?

MR. LUCIANI: As an explicit looking at all of the states in dealing with the CWIP issue, I do not look at all of them. I dealt mainly dealing with those with a large, new construction campaign.

MR. POCH: Now, in the evidence -- in OPG's evidence and in your report, sir -- we find these headings and references to rate shock.

Would you agree that to understand the impact on the customers, the rate impact needs to be looked at in the context of other pressures on the bill, the consolidated bill that customers pay?

MR. LUCIANI: Certainly, you would look at the entire bill and what portion of the bill this particular project might have on that bill, in determining whether there is rate shock.

MR. POCH: Did you analyze that in this case for Darlington refurbishment?

MR. LUCIANI: No, I did not look at the specifics of the Darlington refurbishment economics.

MR. POCH: Now, Mr. Barrett, we asked for OPG's analysis of its projected payment requests and so on in our

Interrogatory 7-7(c), and --

MR. BARRETT: Sorry, what is the L number?

MR. POCH: It's L7-7(c) and (d), I think were the relevant sections. Again, I am not sure you need to turn it up, because your answer was that you felt the -- the OPG answer was that the numbers were uncertain and irrelevant.

I was just going to take that to the next step and ask you: From that, I take it that you have not actually done an analysis of this potential rate shock effect? You haven't even done an analysis of what your request will be specifically in that period; correct?

MR. BARRETT: Not in respect of possible future OPG payment amounts, but we have done it in other respects.

And just to deal with the first part, our view was it is very difficult to project out what the future payment amounts might be. They're subject to a whole series of developments and, in particular, decisions that this Board would issue from time to time.

But if you look at -- as a first instance, if you look at L-14-4, attachment 1, this, to my mind, is actually the best exhibit for looking at the rate shock concern that we have mentioned in our evidence.

So if you look at that table, just as an example --

MR. POCH: Can you just give me a minute to get there, actually?

MR. BARRETT: Oh, I'm sorry. That was a variant on the table that Mr. Stephenson produced.

MR. POCH: Well, on my list of interrogatories by

subject matter, it doesn't seem to appear in the 2.2 section, but hang on a second. Oh, it is in the updated one. All right, go ahead. I have it.

MR. BARRETT: Sure. Thank you. What we were attempting to do here in response to this question is calculate the revenue requirement impact based on the cash flows as we currently understand them.

So, for example, if you look at column 4, which is the current regulatory treatment using the $10 billion capital cost, which is the upper bound of the range that we've identified, you can see in year -- for the first nine years, there is no impact under the current methodology on the revenue requirement, but then in year 10, suddenly you have a $550 million addition to the revenue requirement.

And just to put that in context, the annual nuclear revenue requirement in this case is about $2.7 billion, so this is in the order of about 25 percent, or 20 to 25 percent of that amount. As you can appreciate, that would just be one factor which would be causing rate pressure in that year.

So if you don't address this project through the provision of CWIP, that is a potential future that you could be looking at.

MR. POCH: All right. Just to compare, then, the impact in that year without the CWIP proposal would be the difference between lines 9 and 10 in column 3? That would be the difference between 623 and 360; correct.

MR. BARRETT: That's right. So there is still an

impact, but it is about half the size of the impact that you see in the column 4.

MR. POCH: All right. And you have no indication of what that impact would be on the bottom line of bills for customers, I take it --

MR. BARRETT: Well --

MR. POCH: -- as a percent rate impact, for example?

MR. BARRETT: -- we actually do. If I can just turn you to our evidence?

MR. POCH: You gave an illustrative -- are you thinking of the illustrative example you gave in --

MR. BARRETT: Yes, that's right.

MR. POCH: That is D2-2-2. I think it is at page 6.

MR. BARRETT: I am just going to turn it up. Yes, that's right. So that is Exhibit D2, tab 2, schedule 2, pages 6 and 7. There we have an illustration of the effect of CWIP on smoothing rate impacts on a kind of a one-unit case, and then looking at, on the second graph, all four units.

MR. POCH: Right. First of all, let's be clear. What this is is this is just the impact on your revenue requirement as opposed to total rates for the customers?

MR. BARRETT: No. It is actually neither of those things, and I do apologize, because when I was looking at this evidence again in preparation for today's testimony, I observed that it wasn't very clear what the basis of the percentage is.

MR. POCH: Well, the graphs are actually labelled

"Incremental Revenue Requirement".

MR. BARRETT: Yes. But it is -- the percentages which are expressed in the text are actually with reference to the total cost of generation as we forecast it.

So if you look at lines 14 and 15 on page 6, you will see that the statement:

> "...the rate shock associated with the traditional methodology of 2.5 per cent - 4.1 per cent at the in-service date is smoothed to an overall 2.0 per cent - 3.2 per cent rate increase spread over 10 years..."

So those percentages, the first one is with reference to the $6 billion case, the second is the $10 billion case, and those percentages are really on the basis of our estimate of the total cost of generation to Ontario customers.

MR. POCH: And just in terms of the smoothing effect, it is really graph 2 that is the whole picture or the bigger picture, correct, because you --

MR. BARRETT: It is a four-unit picture, yes.

MR. POCH: You already have some smoothing by virtue of the staggering; correct?

MR. BARRETT: Yes, that's right.

MR. POCH: So it is -- in effect, what you are proposing is to achieve the difference between the dotted and the solid lines on that graph?

MR. BARRETT: Yes. The real benefit of the CWIP proposal is experienced in that first year, where you avoid

having to go from zero to $550 million on the $10 billion case that we talked about earlier.

MR. POCH: But, again, in the alternative, without CWIP, you aren't going from -- rather, with CWIP, you are not avoiding that 500-odd-million step. You are avoiding just roughly half of it?

MR. BARRETT: That's right. It doesn't completely address the fact that rates are going up. It just mitigates the shock or the size of the increase.

MR. POCH: Yes. Now, Mr. Luciani, we asked for your analyses, any analysis you had, to support the statements you made in your evidence about CWIP's impact on credit rating and borrowing costs.

And in response to our L-7-1, -2 and -3, I think basically -- not to -- you basically -- we had a reiteration by OPG of what they understood the bottom line analysis to suggest, the directional impact.

MR. LUCIANI: I'm sorry, what was the reference?

MR. POCH: L-7-1, -2 and -3, where basically we have a restatement of the conclusions you achieve about the direction of the effect in each case.

MR. BARRETT: I'm sorry, we are still turning it up.

MR. POCH: Sure.

MR. LUCIANI: Yes, I'm there. Go ahead.

MR. POCH: So I take it from that, sir, you didn't actually do any study of cash flow coverage ratios that OPG has experienced or will experience, or actual rating history of OPG and what they might expect. Yours was just

at a high level?

MR. LUCIANI: As far as specifics dealing with OPG impacts of the Darlington project, and so on, no.

MR. POCH: Okay. Now, Mr. Barrett, can we agree that - you have just indicated to me that your concern is out at the point when you bring these units into service - that the -- I think it is $37 million -- approximately $39 million impact on revenue requirement this year from inclusion of CWIP, or not.

MR. BARRETT: The test period impact is $37.9 or $38 million, if you want to use round numbers.

MR. POCH: That is less a concern for you, in terms of the impact on these various factors, than the -- you are not worried about the rate shock of that, I take it. You are worried about rate shock later on?

MR. BARRETT: That's right. It is the rate shock that comes when the first unit comes into service if you don't have CWIP.

MR. POCH: Now, Mr. Luciani, you say in your evidence, at the first paragraph on page 11, that -- discussing other benefits, additional benefits -- under the heading "Additional Benefits", you suggested CWIP encourages more willingness to invest; correct?

MR. LUCIANI: Yes.

MR. POCH: Given that in this case OPG has said - and I think you heard it earlier today - that it won't affect its decision -- the availability of CWIP won't affect its decision to pursue the Darlington rebuild, will you agree

that is not an active factor in this particular case?

MR. LUCIANI: I wouldn't fully agree. You have a potential impact on the credit rating of OPG, in the absence of CWIP inclusion in rates, that can drive up the cost to OPG.

So in that sense, I would certainly think there would be more reluctance to invest in any utility, certainly in the U.S., in such a situation.

MR. POCH: Now, this brings us to your more general point that both you gentlemen made, that it can affect credit borrowing costs.

Mr. Luciani, you appreciate that in Ontario, OPG does not have a monopoly over generation?

MR. LUCIANI: Yes, that is my understanding.

MR. POCH: Right. And so in determining the supply mix, which is a process we are just launching back into in Ontario, there is a choice that the government and its agencies will make, as between having OPG provide or continue to provide generation in whatever degree, and turning to market players.

Do you understand that?

MR. LUCIANI: Yes, that's my understanding.

MR. BARRETT: If I could just add, it is the company's view that in respect of the Darlington refurbishment project, that the government has endorsed that project.

So there is no decision remaining in respect of that project.

MR. POCH: I see. We just -- so you're saying that

the recent government commencement of a consultation period on its new supply mix directive, it's a foregone conclusion at this point that that is just -- it's not -- the option of not maintaining this nuclear capacity is just not on the agenda?

MR. BARRETT: I think the government's clearly expressed policy is that it wants to maintain nuclear base load generation in the province. I think at least at 50 percent of the generation.

They have also separately endorsed the Darlington refurbishment project. So as our policy currently stands, I don't see any likelihood of a change.

I will acknowledge that there can be policy changes down the road.

MR. POCH: You will acknowledge that the government is currently consulting on the very question of what policy direction it should give to OPG -- to OPA? I'm sorry.

MR. BARRETT: There is a supply mix process underway, yes, sir.

MR. POCH: And that there is a consultation currently underway explicitly?

MR. BARRETT: That's right. I think that is the first phase of that process.

MR. POCH: And the 50 percent term you just spoke to is the earlier supply mix directive, which will be presumably superseded by the new one?

MR. BARRETT: The 50 percent is also reflective of statements that the government has made very recently. So

we –- certainly, OPG does not expect that policy to change.

MR. POCH: I appreciate you don't, but -- all right.

Now, you have said it lowers borrowing costs, but can we understand where the money comes from with CWIP, as opposed to without?

Would you agree with that with CWIP, one of the effects is that you are funding this from ratepayers, rather than from the financial markets, to the extent that CWIP gives you a return between now and in-service?

MR. BARRETT: Yes, that would be a source of funding.

MR. POCH: Right. So in effect, you are borrowing from ratepayers, if you will, for this future station?

MR. BARRETT: Ratepayers are paying in advance of the unit going in-service, with a view to mitigating the future rate impact and reducing any impacts on our borrowing costs.

MR. POCH: Now, would you agree that for, you know, an elderly ratepayer who has got -- carrying credit card debt, their marginal cost of capital is going to be likely to be higher than OPG's?

MR. BARRETT: I expect that it is the case that certain customers, certain ratepayers in Ontario will have a higher cost of capital than the company. And there may be --

MR. POCH: Can we agree -- sorry.

MR. BARRETT: There may be others that have a lower cost of capital than the company.

MR. POCH: But can we agree in general the ratepayers

that are most susceptible to rate increases are the ones most likely to have a higher cost of capital compared to OPG?

MR. BARRETT: I think that's fair.

MR. POCH: All right.

MR. LUCIANI: I will add, I mean, all customers, industrial customers and so on, might be -- have a lower cost of capital, depending on what their certain circumstances are, and it can affect their businesses, as well.

I wouldn't say that a certain segment has a monopoly on the impact to themselves.

MR. POCH: Fair enough. There was argument last year about the wording in Regulation 53/05, section 6, about inclusion of costs that were -- emphasis on the word "were" -- prudently incurred.

So I want to discuss with you -- I think this is probably for you, Mr. Barrett -- about the question of prudence and when prudence gets assessed in the mechanics of your proposal.

MR. BARRETT: Should I turn up the regulation?

MR. POCH: I don't think it is necessary. The question I –- I really want to get OPG's understanding of this CWIP proposal.

You are suggesting that you be given CWIP in rate base without any testing of prudence at this time? Or with a presumption of prudence, or what?

MR. BARRETT: Certainly, the Board has to be satisfied

that giving us CWIP is just and reasonable; that is the standard that they have for rate-setting.

We expect that there will be ongoing monitoring of the execution of the Darlington refurbishment project. And we also expect that will potentially be periodic or retrospective prudence reviews of how we've executed it, how our actuals have come in relative to the budgets that we put forward.

MR. POCH: So I am trying to understand what the just and reasonable test would be in the circumstances here.

Are you suggesting this Board in this case determine whether they believe the refurbishment of Darlington is likely to be a good idea? What is the -- what are you asking this Board to do?

MR. SMITH: Well, the approvals that we are seeking in this application are set out in -- I will get the tab, but they're in binder A.

MR. POCH: Well, that's -- where it indicates you're asking that the CWIP be put in rate base and you earn a return on it, I think -- Mr. Barrett is nodding, yeah.

MR. BARRETT: That's right. If you look at the list of approvals, we are not specifically asking for approval of the Darlington refurbishment project.

MR. POCH: But you are asking for approval for some of that project to be put into rate base?

MR. BARRETT: Absolutely. If you go, actually, to D2, Exhibit D2, tab 2, schedule 1, and I know this has been -- this is on page 4 -- this has been turned up a couple of

times.

So this is the evidence on the Darlington refurbishment project.

MR. POCH: I'm sorry, this was D2, tab 2, schedule 2 or schedule --

MR. BARRETT: Schedule 1.

MR. POCH: Schedule 1.

MR. BARRETT: So if you look at page 4, to be helpful, we have set out all of the approvals that we were seeking in respect of the Darlington refurbishment project.

So the first one there is approval of the test period O&M costs of 5.9 million and 4.5 million in the two years respectively. That is related to the ongoing definition work.

We are asking for changes in rate base and return on rate base, depreciation expense, tax expense, and Bruce lease net revenues that result from the impacts of the service life extension for purposes of calculating depreciation, the consequent changes in nuclear liabilities.

The third bullet references the thing we're talking about now, which is the inclusion of the CWIP capital, or the capital in rate base for purposes of CWIP.

And then we are asking, under the fourth bullet, for the recovery of the difference in 2010 between the non-capital costs that were actually spent, versus the amounts that were budgeted, and that would be recovered through the capacity refurbishment account.

MR. POCH: All right. Let's focus on that third bullet point.

As indicated, you are asking for inclusion of the CWIP amounts in rate base.

MR. BARRETT: Yes, that's right.

MR. POCH: And I take it it is almost trite to say that the test for including in rate base is it would be used and useful and found to have been a prudent investment. That is the ordinary test.

MR. BARRETT: That is the ordinary test.

I think that the Board, in their infrastructure report, like other regulators, have said that in certain circumstances you need to not have an absolute, strict adherence to the used and useful test, that there are other considerations that need to be brought into bear, such as rate shock, avoiding impacts on utility interest rates.

And that is one of the reasons why they decided to include CWIP in rate base as one of the options available to utilities.

MR. POCH: Right. Now, earlier in this case we've heard that OPG simply hasn't compared the Darlington refurbishment project to other non-OPG alternatives. Do you recall that evidence, Mr. Barrett?

MR. BARRETT: I don't think that was our evidence, to be honest. I think we looked at some base load alternatives. I think we looked at base load gas as a comparison, and then we relied on the OPA to consider whether -- given our LUEC forecast, whether or not there

were better base load alternatives available. And my recollection of their letter was that they said that there weren't.

MR. POCH: Well, all right. So you haven't looked at that question. You have just relied on the OPA saying, If it is 6 to 8 cents like you tell us, it sounds good?

MR. BARRETT: No. I think we did look at base load gas alternative.

MR. POCH: You looked at OPG-owned CCGT, I think is the acronym; correct?

MR. BARRETT: I am not sure if we distinguished whether it was OPG owned or owned by someone else. I don't recall.

MR. POCH: That's fine. The record will speak for itself.

You don't have an analysis of competing options to present to this Board? You haven't done that work?

MR. BARRETT: No. We are not in the business of system planning, and that is why we sought the opinion of the OPA in respect of that comparison.

MR. POCH: And the OPA is not with us today, but the indication in the evidence was that their opinion was expressly based on the assumption that your assumption - your assumption - that your LUEC that you have given them is correct and remains to be correct?

MR. BARRETT: Yes. And I think that is fair to the OPA.

The burden should properly be on us to satisfy the

Board that our LUEC range is correct and robust and sufficiently captures all the foreseeable and reasonable contingencies.

MR. POCH: And this Board hasn't had an opportunity to review OPA's reasoning and what alternatives it considered; correct?

MR. BARRETT: Certainly there was no interrogatories directed to the OPA and they were not called to appear.

MR. POCH: Right. So even your suggestion that this may be the preferable alternative is entirely -- is really untested in this case?

MR. BARRETT: I can't agree with you there, sir.

MR. POCH: All right. If we were to assume that your -- well, let me leave that. Hang on.

Would you agree that if this Board at some point finds that this project was not the better alternative for meeting Ontario's energy needs, that it would have -- it would be, to some degree, an imprudent project?

MR. BARRETT: Well, I think the Board's well-established practice with respect to prudence is to consider what facts were known at the time the decisions were made, and you can't use hindsight to determine whether or not a prior decision was prudent or not. I think the Board has been pretty consistent on that fact.

But if the project was to cease or stop for some reason - and certainly there is no expectation that that would be the case - then obviously we would be back here before the Board and have an obligation to discharge the

prudence -- to meet the prudence test in order to recover any outstanding monies.

MR. POCH: Well, in your evidence at D2, tab 2, schedule 2 on page 2, you reference page 15 of the Board report, and --

MR. BARRETT: Should I turn up the report?

MR. POCH: You can do that. I could just read in the snippet, if you like.

MR. SMITH: Which page of the evidence, sir, sorry? D2, tab 2, schedule 2, page --

MR. POCH: I have my note as D2, tab 2, schedule 2, page 2. Yes. In fact, we can read it right out of your evidence. We don't need to go to the report.

The penultimate paragraph on that page, line 21, talks about the OEB's report, speaks -- and you've got a quote there:

> "...it would '...allow utilities to apply to include up to 100 percent of prudently incurred CWIP costs in rate base'..."

MR. BARRETT: Yes. I think in that context, prudence is synonymous with reasonable, just and reasonable. It is not used in the context of a prudence review, which I see as more of a retrospective enquiry.

MR. POCH: Now, at page 3 under the heading "Proposed Regulatory Treatment", the same exhibit, D2, tab 2, schedule 2, you say that the -- line 10:

> "...the risks of the project are similar to those noted by the OEB for green energy projects..."

And you talk about the kinds of risks. I just wanted to discuss that with you for a minute. Do you agree that you're in a very different position from a transmission utility, for example, Hydro One, who is being asked to build a line to serve a cluster of generators that it doesn't control, the projects of which it doesn't control, and it doesn't need to do that project to keep the lights on, keep its customers serviced? It's at some risk, well beyond its control, to fulfil the goals of the Green Energy Act; build some wind clusters, for example.

Whereas in your situation, this is a project you are proposing, and it is really entirely within your control how it is going to come in and whether it is going to be competitive, and so on?

MR. BARRETT: Yes. I would agree that the risks are different. I don't think we're saying here that the risks are the same. We're saying that there are some similar risks. Certainly we talk about, in the project evidence, there is risk of project delays. I think it is a given, any time you're talking about a nuclear project, there is going to be a degree of public controversy, so I think that is fair, and the recovery of costs. We certainly have a regulatory risk there.

We expect that we will be able to demonstrate that we have prudently managed the execution of this project, but it is also possible that the Board might see some of our activities in a different way, and, therefore, we might not be able to recover some of our costs.

We don't expect that, but certainly that is a risk.

MR. POCH: Well, first of all, can we agree that this proposal here has nothing to do with the Green Energy Act? This is not a Green Energy Act infrastructure that we're talking about, Darlington refurbishment?

MR. BARRETT: That's correct.

MR. POCH: Now, let's go on to your point. If CWIP is granted and there are project delays, for example, so the cost of the carrying costs go up, the carrying costs are the very costs you're asking be awarded to you in rates?

MR. BARRETT: If the project was extended, then the carrying costs would in aggregate go up.

MR. POCH: That is exactly what you are trying to get in current rates as opposed to leaving it to subsequent date for consideration?

MR. BARRETT: That's right. CWIP is the carrying cost on the capital.

MR. POCH: So how will -- if there is a delay next year, if there is a delay that increases those costs, how will the Board control -- will you automatically apply just continue to have all of your carrying costs go through into CWIP, or how will we deal with that?

MR. BARRETT: Well, what we proposed is that the capacity refurbishment variance account would deal with differences between the costs which are forecast and included in rates, and the costs that ultimately arise.

So if I could just explain that by way of an example, let's assume that we anticipate spending $100 million in

capital over the test period and we only end up spending $90 million. What would go into that account would be the $10 million of capital times the awarded cost of capital. So that delta would go in that account.

Then in the next rate cycle, we would be back before the Board saying, We have this balance in the capacity refurbishment account that we're going to give back to ratepayers, because we didn't spend all of the capital that we had forecast to spend.

And I presume at that time there would be submissions about whether or not that was the right number, whether it should be a higher number or whether it should be a lower number, and who was responsible for the delta.

MR. POCH: My question is slightly different. Let's assume you forecast 100 million and you spend 100 million.

MR. BARRETT: Yes.

MR. POCH: But the project has been delayed. You just haven't gotten as far along. So we have had the same carrying costs charged to customers, and less --

MR. BARRETT: So there would be --

MR. POCH: -- less work in the ground.

MR. BARRETT: So there would be zero balance in respect of the project in that account.

MR. POCH: Let's assume there is no variance in what you have spent; just what's been received for value there for the money.

MR. BARRETT: I think it would still be open to people to say that the zero balance was not the right balance,

that there should be a credit balance which is different than zero.

And the Board would hear those arguments and make that determination.

MR. POCH: Here's my problem. Ms. McShane suggested, and you gentleman have suggested today -- and she said it quite explicitly on the record yesterday -- that CWIP gives greater assurance to investors about the likelihood of recovery.

Is that an illusion? Are you in the exact same jeopardy, regulatory jeopardy, for the prudence of your decisions? Or not?

MR. BARRETT: I would say that the prudence test remains the same. I think there are two issues there, as I understand the situation.

One is you get a decision next year or two years from now about the Board's view of how you are prudently managing the project.

Or you wait 10 years until you have spent a lot more money, and then you get a decision.

And I think the risks under those two scenarios would be different from somebody looking to make an investment.

Secondarily, if there are –- if you are not getting the cash flow that would come from CWIP, utilities' credit metrics are going to be impacted. So there will be additional financial risk during that period, until the facility comes into service.

MR. POCH: If you wanted to reduce your risk, you

could ask for project approval in some fashion from this Board, and perhaps not in the normal course, obviously, but you could conceivably, just two years from now, four years from now, say: We've gone this far. We would like to, at this point, ask that monies be put into rate base, subject to whatever protections might be appropriate.

You don't actually have to start charging it to rates now, do you?

MR. BARRETT: No, you don't. But it is our view that given the significant amount of money and the significant rate impact that we see down the road, you want to start this as early as you can to smooth that ramping up of revenue requirements.

So if you wait two years, you have lost two years.

MR. POCH: All right. Madam Chair, those are all of my questions. Thank you.

MS. CHAPLIN: Thank you, Mr. Poch.

Mr. Shepherd? Perhaps, actually, just before you go, I am going to do a time check.

Is my understanding correct, Mr. Smith, that we need this panel to complete today? Is that -- or are they available on Monday?

MR. SMITH: Well, Mr. Luciani is from out of town. It would be preferable, but my understanding is he can be available on Monday if we carry over, and we will just, then, continue this panel and roll into our initially-scheduled panel 10A immediately thereafter.

MS. CHAPLIN: Okay. Thank you. That is helpful.

All right. Why don't you go ahead, Mr. Shepherd? We will need to break today pretty close to 12:30, so if you could find a suitable point to break, that would be great.

CROSS-EXAMINATION BY MR. SHEPHERD:

MR. SHEPHERD: Good morning. My name is Jay Shepherd. I am counsel for the School Energy Coalition. I have a number of brief areas to cover.

Let me start with -- I wrote down what you said, Mr. Barrett, and this may be just that I am missing the nuances of what the company is saying, but you said earlier: We are proceeding with the Darlington refurbishment project.

My understanding was that your board of directors has not approved this project yet, and that the Board, this Board, has not approved this project yet. And so I am trying to get a sense of who is "we".

MR. BARRETT: Let me try and deal with those in two parts.

In terms of the OEB, one of the gaps -- if I can use that word -- in the regulatory framework that governs OPG is that there is no parallel for a leave-to-construct application.

So it is not clear to me how we would come to the Board to seek approval of a project like this.

So you won't see that approval in our list of approvals. What you will see is the consequent impacts of our decision to proceed.

For example, the change to the life of the station is founded in our very high confidence -- I think Mr. Reeve

spoke of more than 90 percent confidence that the project will proceed as we plan it, and will have the life that we expect.

So that is the approvals that we're seeking in terms of this Board.

So in terms of OPG's board, we do have approval to proceed with the project. The project has been designed to proceed in phases -- I think that is what you heard -- that there will be gates, that there will be milestones, there will be things that have to be achieved before you move from -- through one of those gates.

But we are committed to the project. We are expecting it to proceed as we have laid out. And we are proceeding with the project.

MR. SHEPHERD: Okay. So that is the nuance I was having some trouble with, and maybe I just misunderstood it, that I had understood the previous witnesses to say: We have approval for the definition phase, and then we have to make a go, no-go decision in 2012, which is going to be the approval to actually build the thing.

And it sounds like what you are saying is sort of more like a negative option, which is you have approval to build this, unless something changes in the meantime; is that more correct?

MR. BARRETT: Let me try and deal with that by parts.

Is your reference to 2012 confusing this project with a continued operations initiative?

MR. SHEPHERD: No.

MR. BARRETT: Which has really a go, no-go decision, based on the results that are achieved by 2012.

MR. SHEPHERD: I am pretty sure I am not confused on that point.

MR. BARRETT: Okay. What the Board has approved in respect of this project is the timing of the project, the decision to proceed with the project, and the overall release strategy.

The next step in terms of proceeding with that project is to move into the definition phase, and there are subsequent gates.

Now, I think as you heard from our witnesses, if things go unexpectedly, or something, you know, doesn't go right with the project based on our certain plans, you can stop it at one of those gates. It can either be delayed or stopped.

But based on all of the analysis and work that we have done, we expect the project to continue through the gates that we have set out for it.

But the final release, for example, of the execution funds won't happen until one of the subsequent gates.

Does that help?

MR. SHEPHERD: But that gate is like a negative option. If everything goes according to your current plan, then you know it is going to be approved. Your Board has told you: It is okay. On this plan, if it is the way we expect, you are okay in 2012, or whenever it is.

MR. BARRETT: That's consistent with the approval of

the release strategy we have laid out.

MR. SHEPHERD: Okay. Then let me come back to the first part of that question, and that -- or the first part of your answer, rather, which -- you talked about the government endorsing the project, and I didn't actually get a sense when I read the letters from the government that they were saying: Yes, here's our approval. Go ahead. But rather they were saying things like: Looks good to us. Keep us informed.

But, you know, maybe we read it differently, but what I want to focus on is this.

I understand you to be saying that this Board has no role in approval of this project. You do not need this Board's permission to proceed with this project. Is that what you're saying?

MR. BARRETT: I would say it slightly different.

I don't know how we get the Board's approval of the project. What we're seeking is approval of things that flow from proceeding with the project.

Now, presumably, if the Board had a view that it was not reasonable to proceed with the project, then they would not approve the things that flow from that.

So for example, if they thought that it wasn't reasonable to proceed with the project, that those things that are set out -- let me just find a reference -- the things that are set out in chart 1 -- sorry, in chart 1 on Exhibit D2, tab 2, schedule 1, the Board would not incorporate those adjustments into the revenue requirement.

So they would essentially reverse those things if they took that view.

I am certainly not encouraging them to take that view, but that is up to the Board.

MR. SHEPHERD: I am just trying to understand this from a regulatory construct point of view.

Normally -- and you have made the point that you don't have a leave-to-construct process in your legislative framework.

I take it that what you are saying, then, is that aside from your board of directors, there is no one who has to approve your going ahead with the project; is that right?

MR. SMITH: Just one moment, Mr. Shepherd.

Obviously this ultimately engages a legal question. I am fine with the questions proceeding on the understanding that Mr. Barrett is not being tendered as a lawyer to give advice on this point. I am not going to object to the question, but certainly our ultimate position will be set out in argument.

MR. SHEPHERD: That's a fair comment, and I am not asking you to give a legal opinion. I am asking for OPG's current position on this.

MR. BARRETT: The company -- for an initiative of this magnitude, it would not just be OPG's board. We would also have to go to our shareholder and get their endorsement to proceed with the project, and we have sought that and achieved that, in our view.

MR. SHEPHERD: Okay. So then, I mean...

It is hard to resist the temptation to say, then, what are we talking about here, because we're doing a lot of talking over something that this Board has no jurisdiction.

But I take it what you're saying is the spending part is still in this Board's purview; that is, this Board may not have a process where they have to assess the need, for example, as you would in a leave to construct.

But this Board still is in a position of saying, Is it a good idea to spend this money?

MR. BARRETT: Absolutely. The Board is charged with setting just and reasonable rates, and, again, they would decide whether or not the monies that we are planning to spend, and the consequent impacts to depreciation and rate base, and all of those things, all of those would be within the Board's purview in setting just and reasonable rates.

MR. SHEPHERD: And I took it from what you said a few minutes ago with Mr. Poch that the other thing you're saying is that this Board, along the way, as it approves spending money along the way, it doesn't do a prudence review. You are not expecting it to do a prudence review until the end?

MR. BARRETT: No. I think what I said was that prudence reviews, in my view, are retrospective inquiries. They are, How did you do, for example, against budget and schedule?

The Board looking forward, in setting rates on a forecast test year, has to be satisfied that the

expenditures are reasonable, and sometimes reasonable can be synonymous with prudent. But in terms of a prudence review, to me that is a retrospective enquiry where the Board might have a concern that there was some imprudent spending and wants to be satisfied that there wasn't. That is the distinction I am drawing.

MR. SHEPHERD: You are undoubtedly more knowledgeable in the regulatory minutiae than I am, but I have always understood that prudence had two parts to it, that the Board looks at the prudence of expenditures typically before they're made as a planning -- that is, Is this a good plan? Is this a prudent plan? If it works out the way you say it is going to, is that prudent? And that is step one, and this is why you have capital budgets in all of the rate applications.

Then at the other end, the Board says, Okay, we saw your plan. What happened isn't actually exactly like that. Did this end up being prudent as it actually transpired? Isn't that right?

MR. BARRETT: If in the first instance the use of the word "prudence" is synonymous with just and reasonable, then I would agree with you.

MR. SHEPHERD: All right. You will agree that the normal things associated with a prudence review, the conventional prudence review, for the Darlington refurbishment project, that evidence has not been led in this proceeding?

One can't conclude today, based on the evidence that

you filed - "you", OPG, filed - that the Darlington refurbishment project is a prudent project; is that fair?

MR. BARRETT: No, I don't agree with that.

MR. SHEPHERD: Okay. So help me, then.

MR. BARRETT: I think we have led evidence that shows that the project has an attractive LUEC. I think we have led evidence that shows that that LUEC compares favourably with alternative ways of addressing the need for base load generation.

I think we have led evidence that shows that the OPA and the province have endorsed the project. I think we have led evidence to show that we have done a lot of analysis to date, that we have a well thought-out plan for managing the project, for doing assessments, for doing engineering, for developing contracting strategies, for developing decision gates, that is consistent with the best practices of project management.

I think all of that goes to the view that this is -- these are reasonable and prudent expenditures.

MR. SHEPHERD: And you would agree with me, wouldn't you, that the Board, in determining whether to say, yes, go ahead and spend this money, and, in addition, to say, yes, include it in rate base, should satisfy itself that the spending you are proposing is reasonable and that the project is likely a good idea? Yes?

MR. BARRETT: Yes, I would agree with that.

MR. SHEPHERD: Okay. If it doesn't, it shouldn't let you put CWIP in rate base?

MR. BARRETT: Nor should it reflect the other adjustments that are shown in chart 1 of Exhibit D2, tab 2, schedule 1.

MR. SHEPHERD: So --

MR. BARRETT: There is a clear linkage between proceeding with the project and these consequent impacts.

MR. SHEPHERD: Oh, absolutely. So the whatever it is, $150 million reduction in revenue requirement that results from the change in the ARC, and that sort of stuff, would have to be reversed?

MR. BARRETT: The 197.1 million, yes.

MR. SHEPHERD: When you get up to numbers that big, it just doesn't matter.

Okay, let me move to the second question I had in this area, and that is with respect to cost of capital. It could be either of you that answers this, I guess.

But I think it was you, Mr. Luciani, who said that the costs of capital for some of OPG's customers may be lower than OPG; right?

MR. LUCIANI: Yes, that is certainly true.

MR. SHEPHERD: And can you characterize those customers?

MR. LUCIANI: Well, I will characterize them from the U.S. standard point of view.

When you think of an integrated resource plan being done by the typical U.S. utility, it will assess its cost of capital and use that cost of capital in deciding what resources to construct.

That cost of capital will be based on the financing that it can create based on the ratepayers' support, collectively, the ratepayers can provide to the utility.

So typically you might have residential customers on credit cards. You might have residential customers that don't have credit cards that live well below their means and own municipal bonds.

You have a whole array of ratepayers, and you can go through every customer class. And it tends to be an exercise in futility to try to track down each and every ratepayer's discount rate or cost of capital, when what you are trying to do - and it is immediately observable - is the cost of capital incurred by the utility to finance any investment it might undertake.

MR. SHEPHERD: It is true, isn't it, that in the real world the cost of capital for many people is not financial? It is non-financial.

So, for example, if you have to pay more money for something, it means you can't do something else. You can't go on vacation, because you have to buy a new car. That is not a financial cost. That is a practical cost; right?

MR. LUCIANI: Yes. You might, however, vary your spending based on timing. I will make an investment now in order to save my money later. Folks do that all the time.

MR. SHEPHERD: Sure. I am going to come to that in a second.

But, for example, you have ratepayers on fixed budgets, and where they're on fixed budgets, they can't

simply go out and borrow the extra money that you want from them. For the CWIP proposal, for example, they have to actually cut back somewhere else; right?

MR. LUCIANI: Sure. And when the plant does come in service and there is a much larger rate increase, you will have the same problem, only twice or three times over.

MR. SHEPHERD: So I want to use as an example my favourite example, schools. So schools who are on a fixed budget, if they have to pay you an extra couple of million dollars a year, let's say, then they have to find that money somewhere; right? They can't just go borrow it.

MR. LUCIANI: I am not familiar with whether they could borrow it or not. They would have to find additional money.

MR. SHEPHERD: Let's assume hypothetically they can't borrow. You can check if you wish.

MR. SMITH: Sorry, that is not the test for evidence, that we have to go and accept your propositions and check them later. We will make the assumption, but it is not evidence.

MR. SHEPHERD: It is a hypothetical.

MR. SMITH: Okay.

MR. SHEPHERD: If hypothetically schools in Ontario under the Education Act can't go out and borrow money for operating expenses - and anybody who reads the newspaper may have a conclusion on that - then they have to do something like close a library or terminate a music program, or something like that, to pay for this, don't

they?

MR. LUCIANI: Certainly if they cannot raise any additional monies, then they would have to find room in their budget. I would accept that.

MR. SHEPHERD: All right. I think, Madam Chair, that may be a good time to break.

MS. CHAPLIN: All right, thank you. We will break until 1:30.

--- Luncheon recess taken at 12:27 p.m.

--- On resuming at 1:39 p.m.

MS. CHAPLIN: Please be seated.

Are there any preliminary matters? No?

Mr. Shepherd, please go ahead.

MR. SHEPHERD: Thank you, Madam Chair.

I would like to turn if I could, witnesses, to Exhibit L-14-4 under Issue 2.2, but just for convenience, I wonder if we can use K13.4, which is identical to your IR, except that it has added a cumulative column.

Do you have that? That is the PWU's handout this morning.

MR. BARRETT: I think we're there.

MR. SHEPHERD: Thank you.

So it appears to me that before any units are in-service, that is before you are producing any power from the spending, you expect that the ratepayers will have paid somewhere between 740 million and $1.1 billion in their rates; is that right?

MR. BARRETT: Is that simply the addition of the

numbers in the "without CWIP" column?

MR. SHEPHERD: It is actually the "CWIP proposal column" and --

MR. BARRETT: Sorry, sorry.

MR. SHEPHERD: This is why I suggested you use the PWU one, because they do have the cumulative numbers.

MR. BARRETT: Sorry, could you give me the numbers again?

MR. SHEPHERD: So 740 million to 1.1 billion.

MR. BARRETT: Yes, I see those.

MR. SHEPHERD: And so that is how much the ratepayers will have paid before they see any power from these units?

MR. BARRETT: Based on our currently projected cash flows.

MR. SHEPHERD: Okay. Well, is the range; right? You said the range is 6- to $10 billion, and so you are not changing that?

MR. BARRETT: No I'm not.

MR. SHEPHERD: So it is not going to be lower than 740 and it is not going to be higher than 1.1 billion?

MR. BARRETT: No, it's not.

MR. SHEPHERD: Okay. Let me clear something up for a second.

You see the total for 2011 and 2012 in both the six billion and 10 billion examples, is $20 million.

I thought I heard you say this morning, and I think I have seen in the evidence, where you say that the revenue requirement impact for 2011, 2012 is 37.9 million?

MR. BARRETT: The revenue requirement impact is 37.9. I think you have to appreciate that this presentation is a relatively simplified illustration. It is not precise.

MR. SHEPHERD: Well, half of the real number is less than -- I wouldn't have said "precise" is the correct word. It is just wrong, isn't it?

MR. BARRETT: For purposes of this presentation, we think it is -- it's indicative of the impacts. It's only illustrative, and we have been very clear on that point.

MR. SHEPHERD: So we shouldn't rely on these numbers as being correct, or even reasonably close to being correct?

MR. BARRETT: I think you should rely on them as being reasonably indicative, but they're not precisely correct.

MR. SHEPHERD: So when I just asked you it is not going to be lower than 740 and it's not going to be higher than 1.1 billion before you produce power, you have a high confidence of that, but you are not sure?

MR. BARRETT: I think as you heard in our testimony, we have very high confidence in that range of cash flows, but it's not 100 percent.

And again, these are only illustrative presentations in this table.

MR. SHEPHERD: Give me a second, please.

MS. CHAPLIN: Certainly.

MR. SHEPHERD: Okay. Do you have more precise numbers for these that would be more consistent with your 37.9 million number?

MR. BARRETT: We have precise figures for the test period. Beyond the test period, these are the best numbers to use.

MR. SHEPHERD: Okay. Let me go to the next area, then.

MS. CHAPLIN: Sorry, I don't mean to interrupt, Mr. Shepherd, but just so I can understand the comparison that is being made, the revenue requirement number for the test year -- for the test period is the 37.9 million?

MR. BARRETT: That's correct.

MS. CHAPLIN: Now, would I compare that to the -- this 20 million as being the comparable number that is on this "cumulative" column?

MR. BARRETT: That's right.

MS. CHAPLIN: Okay. Thank you.

Mr. Shepherd, whenever you are --

MR. SHEPHERD: Thank you. So these numbers are revenue requirement numbers; right?

MR. BARRETT: That's right.

MR. SHEPHERD: This impacts on revenue requirement?

MR. BARRETT: There are really two elements in this. There is the return on the capital, and then once the units go into service, there is the depreciation.

The other elements of the revenue requirement, since they're common, whether they're CWIP or not CWIP, aren't part of this illustration or as part of this presentation.

MR. SHEPHERD: Okay. Where I was going is these are not unit costs numbers; right?

MR. BARRETT: No. These are aggregate dollar figures.

MR. SHEPHERD: Presumably, as you bring units into service, you have additional production?

MR. BARRETT: As units come into service, that's right. But for example, if you look at the $550 million year, 2020, we'll have at least one Darlington unit out then, perhaps two, because there is some overlap in the refurbishment outages. And we'll be at the tail end of the Pickering production.

So if you start to look at unit rates, you can see that there will be a pretty significant unit rate impact as well.

MR. SHEPHERD: Okay. So I don't actually understand that.

When you have that $550 million of additional spending, or additional rates, if you like, revenue requirement, in year 10, that $550 million represents a certain amount of production from a unit; right?

MR. BARRETT: No. That's the recovery of capital and the depreciation on that capital.

MR. SHEPHERD: And the reason you are recovering that in that year is because the unit is producing power; right?

MR. BARRETT: Yes. The unit will -- yes, one of the units is in-service there. What I was saying is that there are other units which will be out of service and undergoing refurbishment.

MR. SHEPHERD: So you have to wait until all of the units are in service before you look at the unit cost

impact of this?

MR. BARRETT: That's right.

MR. SHEPHERD: The actual rate shock really happens -- it is sort of -- it's volatile when you have units in and out of service, until you get them all in service again, and then you can measure it; right?

MR. BARRETT: If you are simply considering it on the basis of dollars per megawatt-hour, yes.

We've tried to present it here in a more simplified and aggregate fashion, looking at the total aggregate dollars coming in, relative to some expectation of what the total revenue requirement might be.

MR. SHEPHERD: This chart has one unit coming in service in year 10; right?

MR. BARRETT: Yes. That's right.

MR. SHEPHERD: And another one in year 11?

MR. BARRETT: I am just trying to find where the -- where we have indicated the assumptions in terms of the units coming back, if you could just bear with me one second.

MR. SHEPHERD: While you are looking at it, it looks like there is one in 13 and one in 14, as well. You can check those too.

MR. BARRETT: Probably have to go back to the D2 evidence. It doesn't seem to be identified in that interrogatory response, so bear with me.

MR. SHEPHERD: I am really trying to find out what underlies these numbers. These are numbers that you

calculated, illustrative examples.

MR. BARRETT: Yes. These are just the return on the capital and the depreciation. So when a unit comes into service under the current methodology, it would go into rate base, start to get a return. It would also have a depreciation cost in that year.

MR. SHEPHERD: And when you do an illustrative example, you have to make some assumptions, and so I am asking what were your assumptions when you did this particular example as to when the units came into service.

MR. BARRETT: And the assumptions would have been the assumptions which underpin our plan, which is described in D-2, tab 2, schedule 1.

MR. SHEPHERD: Okay.

MR. BARRETT: And I am just...

MR. SHEPHERD: 2020, 2021, 2023 and 2024.

MR. BARRETT: Do you have a reference?

MR. SHEPHERD: No, I am guessing.

MR. BARRETT: Is it? Yes. If you look at figure 2 of D2, tab 2, schedule 1.

MR. SHEPHERD: Yes.

MR. BARRETT: It has the first one coming in 2019, and then it looks like 2021, and then perhaps 2022, and then finally in 2024.

MR. SHEPHERD: Oh, that's interesting, because there's no costs in the current regulatory treatment for 2019, is there?

MR. BARRETT: I think you assume that, for the

purposes of this presentation, it is the end of 2019, so you see a full year of costs in 2020.

MR. SHEPHERD: Oh, so you're not using -- you're not saying that there is any -- that it is included in rate base in 2019. You're actually assuming it is included in rate base in 2020?

MR. BARRETT: As I said, there were a number of kind of simplifying assumptions in terms of the presentation of this.

MR. SHEPHERD: And that of course would -- all right, I will leave that.

Let me -- what this looks like, Mr. Barrett -- and tell me if this is a fair analogy. I am old enough to remember lay-away plans, where you couldn't really afford to buy something, so what you did you put some money away every week or every month until it built up to enough you could buy something.

This looks like a lay-away plan to me. Is that a fair analogy?

MR. BARRETT: I am not all that familiar with lay-away plans --

MR. SHEPHERD: You're younger, then.

MR. BARRETT: -- I have to confess. This is -- as the Board set out and described in its report, it is a way for the utility to recover the carry on the capital expended prior to the asset coming into service, so that at the ultimate asset value that goes into service is lower.

MR. SHEPHERD: Yes. No, I was actually not thinking

about it from the utility's point of view. I was, rather, thinking about it from the ratepayer's points of view. You're asking the ratepayer to put aside money for something that they will get the benefit of ten years from now; right?

MR. BARRETT: I think that is part of the bargain associated with avoiding the downstream rate impact or mitigating the downstream rate impact, avoiding the impacts on utilities' debt costs.

MR. SHEPHERD: Then let me turn to this credit rating question, and I just have one question about this. And this may be for you, Mr. Luciani.

Is it true -- am I right in assuming that the impacts of the change in your credit metrics will be, usually, different for an investor-owned utility than for a government-owned utility? Is that fair?

MR. LUCIANI: I don't know about usually. I think it could be. I think a decline in your credit metrics being would always be viewed negatively.

MR. SHEPHERD: Clearly. But if, for example, a credit rating agency gives weight, as they sometimes do, to the implicit government guarantee associated with government ownership, that would tend to lessen the impact of the changing credit metrics on your rating; isn't that true?

MR. LUCIANI: I would think that what you're describing, some sort of perceived support from the government might have an impact on your current rating.

I would think, though, that launching a full-scale

capital-intensive program would have a negative impact on that rating, because you are not changing the government support between the two cases. The only thing you are changing is that capital-intensive campaign. So I wouldn't think that it would necessarily -- necessarily be different. I presume it could be.

MR. SHEPHERD: Okay. If you are a person who buys bonds, say, like most of us in this room, and you are looking at an entity where your primary safety net, if you like, was that it is owned by the government, it would appear to me self-evident - maybe I am just misunderstanding what you're saying - that a change in the business side of their risks is not going to have as much influence there as it would if you don't have that implicit guarantee. Am I wrong?

MR. LUCIANI: I am starting with a base point that might be different because of the government-supported financing.

Let's, for example, assume a municipal bond with a 5 percent rate, and a corporate bond with an 8 percent rate, okay? They're already starting at different points. Now, there is financial distress on both of them. There is some sort of deterioration in the supporting credit metrics.

It may well be that one goes to seven and one goes to four; right? They both may move equally. I wouldn't necessarily think that the movement in and of itself wouldn't change -- would necessarily change differently.

You know, it could well be that that would be the case, but I would think that the movement itself may not be necessarily different.

MR. SHEPHERD: Okay. My last series of questions is with respect to the milestones, and I think this is for you, Mr. Barrett.

Do I understand correctly that the definition phase is supposed to end in a milestone in 2012?

MR. BARRETT: I am just going to turn to that chart. There is a chart in D2, tab 2, schedule 1. If you look at figure 2 on page 10 of 17, you can see that there's two parts to the definition phase. There is preliminary planning and detailed planning leading up to a release quality estimate in 2014.

And there is some overlap between the preliminary planning and the detailed planning, and that is -- in terms of the preliminary planning overlap, that is really in respect of certain of the regulatory approvals that we will be seeking that will just take a little bit longer, but you can see that there is a gate 4 before we move into detail planning.

MR. SHEPHERD: Do we have, in the evidence somewhere, the amount you expect will have been spent so far by the ratepayers at the point where you reach gate 4? Do we know what that number is? Assuming your CWIP proposal is accepted, is there a number that the ratepayers will be out of pocket by that time, X dollars, total?

MR. BARRETT: By gate 4, you are talking about --

which looks to be at the end of 2011?

MR. SHEPHERD: No. No. You just said gate 4 was the point in time at which you go -- you end the definition phase.

MR. BARRETT: No. That is the release quality estimate, which is 2014, as I read this chart.

MR. SHEPHERD: Okay. Then let's say the release quality estimate, okay? At that point in time when you have the release quality estimate, at that time, do we know how much the ratepayers will have spent so far, out of pocket, collected in rates?

MR. BARRETT: We've put in -- we've put those numbers in evidence. For the test period for the 2011 and 2012 period, it is $37.9 million, which I have spoken to --

MR. SHEPHERD: Yes.

MR. BARRETT: -- in response to an interrogatory. For a period 2013-2014, I think we have estimated that amount at $145 million for that second two-year period.

MR. SHEPHERD: So call it $183 million before you have the release quality estimate; right?

MR. BARRETT: I think that is about right.

MR. SHEPHERD: And we will also have at that time an amount in rate base?

MR. BARRETT: That's what gives rise to the CWIP dollars; that's correct.

MR. SHEPHERD: Do we know what that number is, the amount that you expect to be in rate base at the time you have the rates quality estimate?

MR. BARRETT: I am certain we have put in evidence the capital -- the projection of capital expenditures. I know that there is a confidential interrogatory which gives that information.

MR. SHEPHERD: And I am looking at it, and the reason why I am not saying, 'Isn't that number X?', is because it is confidential.

But can you, in a general sense, tell us: How big is that number, the amount that will be in rate base at the time you have the release quality estimate?

MR. BARRETT: Not without reference to that interrogatory. I don't recall the precise capital spend.

MR. SHEPHERD: Is it fair for us to look at that, add up the numbers for each year up to 2014, and say that is the number in rate base?

MR. BARRETT: Based on our current projections.

MR. SHEPHERD: Okay, that is good enough.

Then the third thing is we had a discussion with the Darlington refurbishment panel about the possibility that at the time you got there, to that point in time in 2014, you would also have commitments that you have made to people to spend additional money, because as you say, this is not completely linear. There is some overlap; right?

So they said yes, here probably will be some commitments. And if at that time you said: No, we're not going to do this, there might be some money to spend; right?

MR. BARRETT: I think that is fair.

MR. SHEPHERD: Do we have any idea how much that is likely to be?

MR. BARRETT: No, I don't.

MR. SHEPHERD: Is it fair to say it is probably going to be hundreds of millions of dollars in a project this size?

MR. BARRETT: I don't want to give evidence on that point, given my limited understanding of that. That may be a detail that's somewhere in the project evidence, but it is not -- I am not familiar with the project at that level of detail.

MR. SHEPHERD: Let me ask it a different way.

Is it likely to be a material amount?

MR. BARRETT: I expect it would be.

MR. SHEPHERD: Okay. And then finally -- so these are all amounts that the Board will have, by that time -- assuming your proposal is accepted -- the Board will at that time either have allowed you to collect from the ratepayers, or allowed you to put in rate base, or allowed you to make commitments for; right?

MR. BARRETT: That's right. And that will happen in two stages.

We will have this proceeding, which will cover the 2011, 2012 period.

And we expect to be back for another application, which would cover the 2013, 2014 period.

MR. SHEPHERD: Now, do you have -- it isn't in your evidence, but I am wondering whether you have available a

proposal for the treatment of those amounts, if it turns out that you don't go ahead with the project. You get to the release-quality estimate and you say: Now, this is going to be too expensive, or the policy has gone in a different direction, and you know, we're not building nuclear any more.

And there's, I don't know, a couple of billion dollars, let's say, that is committed or spent.

Do you have a proposal as to -– today, or an expectation as to what would happen to that money?

MR. BARRETT: Yes. We would bring that money forward for recovery, pursuant to Section 6.24 of the Regulation 53/05. The test in that part of the regulation is a prudence test, so we would have to demonstrate that we had been prudent in the execution or management of that project in order to recover any monies.

MR. SHEPHERD: And you would agree, wouldn't you, that if -- if the Board allows you in that period to include CWIP in rate base, then the --

MR. BARRETT: Sorry, is this the period after the project has been stopped, or the prior period?

MR. SHEPHERD: The period up to 2014.

MR. BARRETT: Yes.

MR. SHEPHERD: If the Board allows you to include CWIP in rate base in that period, you would agree with me, wouldn't you, that the Board would then be less likely to say, should be less likely to say: Wait a second. We didn't tell you this was okay. Because they would have in

effect already told you that it was okay; right?

MR. BARRETT: Yes. I think it would be inconsistent for the Board to have a view that we shouldn't be proceeding with the project and still allowing us to recover CWIP in rate base. Or, as I have indicated earlier, the other adjustments which are set out on chart 1 at Exhibit D-, tab 2, schedule 1.

The Board should be satisfied that it's reasonable and prudent, to use the definition we talked about before, for us to be proceeding with this project in order to make these adjustments to rates.

MR. SHEPHERD: And therefore the Board is implicitly, if it allows you to include CWIP in rate base -- tell me whether this is correct -- the Board is implicitly saying to you: Even if you don't proceed with this project, if you spend this money that you are planning to spend, we're going to let you recover it from ratepayers?

MR. BARRETT: I think that goes too far. I think the Board would still reserve for itself, and appropriately so, the ability to go back, through a retrospective view, to see whether or not we had executed the project that gave rise to those actual expenditures in a way that was reasonable and prudent.

MR. SHEPHERD: But the Board couldn't say in 2014 -- not consistent with a CWIP decision today -- couldn't say this was a bad idea from the start?

MR. BARRETT: I think that would be inconsistent, but they could say: We found the project to be reasonable,

based on a project plan and series of processes that you laid out for us, and you departed in some fashion from that and that gave rise to extra costs, and we're not satisfied that that was a prudent development.

That certainly would be -- the Board would be free to do that.

MR. SHEPHERD: Now, that's not the whole of it, is it? Because you talked about this 197 million that arises in the 2011, 2012 period as a reduction in the revenue requirement because of the extension of Darlington; right?

Remember? You recall that?

MR. BARRETT: Yes.

MR. SHEPHERD: And there will presumably be a similar amount for 2013 and 2014; right?

MR. BARRETT: There will be an amount. How close it is to this number, I am not certain.

MR. SHEPHERD: And if the project didn't go ahead, that 400, 500, whatever million dollars, that would have to be collected from the ratepayers too; right?

MR. BARRETT: Certainly there would be a resetting of the ARO. There would be an adjustment to the depreciation life. There would be a series of adjustments.

I don't know if that gets you exactly back to a perfectly equivalent amount. I haven't done that analysis.

MR. SHEPHERD: It's going to be a big number? It would be a big number?

MR. BARRETT: It will be millions of dollars, or a material amount, if that is the answer you're looking for.

MR. SHEPHERD: That is all of my questions. Thank you, Madam Chair.

MS. CHAPLIN: Thank you, Mr. Shepherd. Mr. DeRose?

MR. WARREN: Mr. De Rose has kindly allowed me to precede him, Madam Chair.

MS. CHAPLIN: Go ahead, Mr. Warren.

CROSS-EXAMINATION BY MR. WARREN:

MR. WARREN: Mr. Barrett, just before we leave it, if you could turn to Exhibit L, tab 14, schedule 4, this is the VECC interrogatory and the table to which Mr. Shepherd was referring.

MR. BARRETT: Yes I have that.

MR. WARREN: I am no doubt the only one in the room that doesn't understand that. But if I look at 2011, 2012, we know that the amount to be recovered from ratepayers is 37.9 million; correct?

MR. BARRETT: That's right, for the test period.

MR. WARREN: And I am puzzled, then. Why would you put in the numbers 10 in each year, when we know what the exact number is?

MR. BARRETT: Again, I think it has to do with the simplifying assumptions that the analysts made in doing this work.

I think there was an assumption about when the capital would come in that would be different from the traditional rate base, opening, closing -- average of opening and closing balances.

MR. WARREN: But those numbers are just wrong?

MR. BARRETT: They're illustrative. They are not the most accurate numbers for the test period. The most accurate numbers for the test period are 37.9.

Again, the whole purpose of this was just to illustrate what happens down the road if CWIP is not approved, and the rate impacts that will be realized.

MR. WARREN: Other than the two numbers which we know to be wrong, can the Board rely on any of the numbers in this chart?

MR. BARRETT: For its purpose, yes.

MR. WARREN: I don't understand that answer.

MR. BARRETT: Again --

MR. WARREN: If we don't know what the numbers are, what reliance can we put on them? Any?

MR. BARRETT: The underpinning cash flows are the same cash flows which are in -- that underpin the economic feasibility of the analysis that have been provided to the Board in that confidential undertaking.

The calculation of the revenue requirement impact has been somewhat simplified.

MR. WARREN: What's the difference between being simplified and being wrong, Mr. Barrett? Can you help me with that?

We've got two numbers that we know are wrong. What's the difference between a simplified number and a wrong number?

MR. BARRETT: In this particular instance, it goes to the level of precision that is necessary to illustrate the

point.

Whether we had $37.9 million there or $20 million there, the point that we're trying to make with this response would be no different.

MR. WARREN: I will leave it at that, Mr. Barrett.

Mr. Luciani, just a few questions for you. If you could turn up your report, which -- Madam Chair, for purposes of the record -- is Exhibit D4, tab 1, schedule 1.

Mr. Luciani, if you could get to section 2.2, which begins on page 3?

MR. LUCIANI: Yes.

MR. WARREN: Mr. Luciani, I apologize in advance. I went back through the interrogatory responses again yesterday, and I couldn't find this.

Perhaps it is in the evidence. Can you tell me which of the utilities that are referred to here or which of the projects here are investor-owned utilities and which are state-owned utilities?

MR. LUCIANI: I believe all of the projects noted here are investor-owned utilities.

MR. WARREN: Okay.

MR. LUCIANI: For the most part, other than investor-owned utilities, it is a lot of capital to raise for any other type of utility. They would tend to be co-owners and own a minority share of a big piece -- of a bigger project.

MR. WARREN: If I look at your chart, which summarizes the states, which is on page 4 --

MR. LUCIANI: Table 1.

MR. WARREN: -- table 1, with the exception of North Carolina and South Carolina, the project-specific -- the projects to which the CWIP legislation applies are nuclear projects; correct? Have I got that right?

MR. LUCIANI: I believe Michigan notes large capital investments, but, for the most part, yes.

MR. WARREN: Fair point.

At a high level of generality, would I be correct in understanding that the purpose of this legislation is to persuade or, if you wish, induce investor-owned utilities to spend a very great deal of money building large projects, principally nuclear projects; is that fair?

MR. LUCIANI: No, I wouldn't say it that way. To persuade and induce, I would not characterize it that way.

I would characterize it as the investor-owned utility identifying a new nuclear facility as potentially economic option, but noting the very high difficulties in raising the capital to do so, and, in working with the legislature, or the legislature aware of that, are trying to come up with a methodology that would help support the financing of an economic new facility.

MR. WARREN: And the legislature passes legislation authorizing CWIP and they hope that passing that legislation will be persuasive, sufficiently persuasive, to get the investor-owned utility to invest in the project; is that fair?

MR. LUCIANI: Again, "persuasive" is not a word I would use. I would say that they would -- that the

investor-owned utility would find it supportive of ongoing -- entering into the nuclear -- the new nuclear facility.

MR. WARREN: So I look at your table 1, there are nine states that have passed this legislation. Am I correct in understanding that 51 states don't have legislation authorizing the use of CWIP; is that fair? Sorry, 41.

[Laughter]

MR. WARREN: I am a member of the Tea Party. I keep adding things.

[Laughter]

MR. LUCIANI: I think it would be fair to say that most of the other states have not -- they would be summarized here if they had. Most other states are not considering a significant investment in a new nuclear facility. Some of the states in the U.S., of course, are -- the investor-owned utilities do not build regulated facilities. They are deregulated, as far as the generation. So those states, it would not exactly matter.

For the most part, you are finding in the south, the south central part of the country, where nuclear -- new nuclear facilities are being contemplated.

MR. WARREN: Now, I wonder, Mr. Luciani, finally, a couple of questions. If you could turn up the first page of your report, second full paragraph, second sentence:

> "Given the magnitude of the funding required, Ontario's utilities need greater regulatory certainty prior to making significant capital

investments..."

Would you agree with me -- you understand that the shareholder in this case, the government of Ontario -- sorry, let me be more precise. The representative of the shareholder, the province of Ontario, has told OPG to build this facility. You understand that?

MR. BARRETT: Sorry, if I could just interject, that is not correct, sir.

The province has endorsed the OPG board's decision. Certainly we earlier received a directive to explore the feasibility of Darlington refurbishment.

MR. WARREN: Fair distinction, Mr. Barrett.

The province of Ontario has approved the building of this refurbishment of this facility. Is that a fairer characterization of it?

MR. BARRETT: Yes, I will accept that.

MR. WARREN: You understand that, Mr. Luciani?

MR. LUCIANI: Yes.

MR. WARREN: Could you and I agree that is a very high degree of regulatory certainty when the province of Ontario approves the building of the project? Do you not agree with that?

MR. LUCIANI: I would accept that it provides additional regulatory certainty.

MR. WARREN: Now, looking just at the end of that paragraph, the final paragraph, the final sentence says:

"The resulting greater regulatory certainty of placing CWIP in rate base mitigates the

disincentive for utilities to construct the long-lead time projects needed."

You would agree with me that since the province of Ontario has approved this, there is no disincentive to building it; fair?

MR. LUCIANI: No, I would not say that at all.

There is certainly a disincentive -- again, this is from -- from a U.S. perspective, you could not build a facility, a new nuclear facility, where you're talking about $6 billion, $10 billion, $12 billion, without some supporting regulation in effect for the recovery of the funds.

That is what this sentence is talking about. Without that support for the recovery, you are talking about potential for significant credit metric deterioration and the possibility of higher debt costs.

I think that would be true regardless of the shareholder being the province.

MR. WARREN: Can you point me, Mr. Luciani -- perhaps I have missed it, but can you point me to any example where the province of Ontario has approved or authorized or directed the construction of a nuclear facility where the cost of that nuclear facility has not been recovered in its entirety, or, to put the matter another way, can you point us to an illustration where the province of Ontario has authorized or directed the construction of a nuclear facility and allowed it to default?

MR. LUCIANI: I am not aware of such a circumstance.

MR. WARREN: Thank you.

Mr. Barrett, a couple of questions finally for you.

If you could turn up the prefiled evidence at Exhibit D2, tab 2, schedule 2, beginning at page 3?

MR. BARRETT: Yes, I have that.

MR. WARREN: In the second -- sorry, first full paragraph under heading 4.0, you say, or the evidence says:

> "Moreover, the risks of the project are similar to those noted by the OEB for green energy projects, which include risks related to project delays..."

And you dealt with that with Mr. Shepherd, I believe. Let me deal with the question of public controversy.

Am I to understand, by this, that there will be some public uprising that would prompt the government to renege on its support for this project? Is that what we are supposed to understand?

MR. BARRETT: No. I don't think that is what we're saying here. We are just observing that there will be -- we expect that there will be some public opposition to our plans.

There is a series of regulatory processes that have to be achieved as part of the Darlington refurbishment, certain EAs, certain CNSC approvals, and we expect that there will be some opposition to through those processes.

MR. WARREN: The fact there may be some opposition, that there may be -- for example, perhaps Mr. Gibbons isn't happy with the refurbishment of Darlington. I haven't

asked him personally, but he may be. Is it the suggestion that this is a meaningful risk that some folks will be unhappy with the refurbishment of Darlington? Is that your position, sir; this is a meaningful, credible risk?

MR. BARRETT: We expect the project to be executed. As we have laid out, we expect that we will be able to achieve our plan. There are risks there, but we expect that those risks are manageable.

MR. WARREN: And, finally, in that sentence, the recovery of costs, and I put the same proposition to you as I just put to Mr. Luciani.

Are you aware of any instance of a nuclear facility in this province, either approved or directed by the province of Ontario, that the province has allowed to default so it can't recover its costs?

MR. BARRETT: I am certainly not aware of any default.

I don't want to get into a debate about the history of Ontario Hydro and what costs were recovered or not recovered through the restructuring process.

MR. WARREN: Now, my final question, sir, is on the next page. This is really a kind of a follow-up to questions my friend, Mr. Shepherd, asked that deal with section 4.1, "Costs of the Project in Relation to Current Rate Base".

As I understand this evidence, Mr. Barrett - correct me if I'm wrong - the comparison here is between the total of the estimated cost -- sorry, the estimated costs of the entire project, which is between 6 and 10 billion, correct,

and the amount of the CWIP; is that fair? Is that the comparison being made?

MR. BARRETT: No. The comparison that is being made in 4.1 is --

MR. WARREN: I'm sorry. I apologize. Between that and the overall rate base of OPG; is that fair?

MR. BARRETT: The nuclear rate base.

MR. WARREN: Okay, the nuclear rate base.

MR. BARRETT: Yes, of approximately $4 billion.

MR. WARREN: But the issue before the Board in this case is whether to approve CWIP for the definition phase of the project; is that correct?

That's the narrow question that the Board has to decide in this case?

MR. BARRETT: We haven't framed it that narrowly. We are asking for CWIP for the entire period, but I understand that we would be -- there would be another case in two years, and this may very well be an issue again.

MR. WARREN: Well, if you just take it for the sake of -- we will deal with that, I presume, in argument, Mr. Barrett.

But let's just take it for the moment that the narrow issue which is before the Board for the test period is the approval of CWIP for the definition phase. Okay?

What's the cost of the definition phase? Not the CWIP portion of it, but the cost, estimated cost of the definition phase?

MR. BARRETT: I don't have that number. Are you

talking about the capital costs in the test period?

MR. WARREN: Yes.

MR. BARRETT: Just bear with me.

So I am just looking at the "approval" section, which is the place I go back to.

So in 2011, the amount of capital that would be in rate base is $125.5 million.

And then in 2012, the amount that would be in rate base is $306 million.

MR. WARREN: So it is a little over $400 million in total capital for the definition phase in the test period?

MR. BARRETT: No. Those are not additive. If you want to look at the average amount in rate base over the test period, it would be the average of those two numbers.

MR. WARREN: But if we compare the average, then, to the total rate base of the nuclear phase -- of the nuclear portion of OPG, it is a very much smaller percentage than the one that is represented in section 4.1; fair?

MR. BARRETT: Yes. I mean, our understanding of the screening criteria or consideration criteria that is in the Board's report, is the cost of the -- what the criteria is described as is the cost of the project in proportion to the current rate base of the utility.

So we understood that to be the total cost of the project. And that is what we've used for purposes of comparison.

MR. WARREN: My final question, Mr. Barrett, is in your discussion with counsel that preceded me, you talked

about borrowing costs and the effect on borrowing costs.

I take it that we have no numbers by which we can determine or we can assess what the impact or possible impact may be on borrowing costs of CWIP, one way or another? Is that fair?

MR. BARRETT: That's fair.

MR. WARREN: Thanks very much. Those are my questions.

MS. CHAPLIN: Thank you, Mr. Warren. Mr. DeRose?

MR. DeROSE: Thank you, Madam Chair.

CROSS-EXAMINATION BY MR. DEROSE:

Mr. Luciani, my name is Vince DeRose. I represent Canadian Manufacturers & Exporters.

And my first question is for you. Mr. Warren has just referred you to your evidence where you talk about the nine states where CWIP is available.

Are you aware if any of the utilities in those nine states advised either their legislature, where legislation was required, or their regulator, where it was approved by regulation, that they would proceed with the project in question regardless of whether CWIP was or was not approved?

MR. LUCIANI: I am I am not aware specifically whether they said that or not.

MR. DeROSE: Okay. And Mr. Barrett, do I understand it right that in this case, even if the Board rejects your CWIP proposal, OPG will proceed with Darlington refurbishment?

MR. BARRETT: Yes. We've been -- I think we answered an interrogatory on that question.

MR. DeROSE: Thank you very much. Now, Mr. Barrett, in Mr. Luciani's report, he refers to intergenerational subsidies as one of the aspects of CWIP.

Does OPG accept that if CWIP were approved, that it would constitute an intergenerational subsidy?

MR. BARRETT: "Subsidy" is a pretty loaded word. Certainly there would be intergenerational transfers, or intergenerational issues. We would be having customers paying an amount now for an asset that would be coming into service later.

MR. DeROSE: Okay. So --

MR. BARRETT: But -- if I could just finish -- as the report goes on to indicate, that that is not an uncommon feature of regulation or rate-setting.

It becomes an issue, I think, when it becomes -- when it rises to a level that it is undue, but you are never going to have a situation where there are no intergenerational transfers.

MR. DeROSE: Now, would you agree with me that one of the rationales for the normal, traditional approach of putting capital costs into rate base at the time that a project becomes used and useful, is that -- to avoid that very issue, that customers from, in this case, a decade before would be paying for a project that does not provide any benefit to them?

MR. BARRETT: Certainly that is part of the thinking

around the current model. So that the ratepayers are seeing directly that the asset is now in-service and serving their needs.

But as Mr. Luciani's report indicates, there's been ebbs and flows around this issue historically. There have been prior periods where CWIP was used.

And my takeaway from the report is that when you are in a period where you are doing a lot of building of infrastructure, then that is a period where you are more likely to see supports like CWIP in rate base put in place.

MR. DeROSE: Okay. And would you agree that -- the way I take your evidence is that one of the considerations that OPG has undertaken or that one of the drivers for CWIP is that you are better off that customers pay now to mitigate the rates in 2020, to avoid possible rate shock or large increases in 2020; is that fair?

MR. BARRETT: Yes, that is one of the principal reasons that we have advanced.

And in the Board's report, when the Board considered this very question and put CWIP in rate base in the utilities' tool kit, it decided that, as I read the report, on a similar basis, that this was a way of dealing with rate shock.

MR. DeROSE: Okay. And is it your regulatory group that considers whether increasing customer costs now to mitigate future costs impacts is or is not appropriate?

MR. BARRETT: Certainly we developed the regulatory strategy, and bring that to senior management and

ultimately our board for approval.

MR. DeROSE: Okay. And do I, then, take it that it is also your regulatory group that would assess whether mitigation is required for current customer impacts?

MR. BARRETT: In the context of a rate application?

MR. DeROSE: Correct.

MR. BARRETT: Yes, that's right.

MR. DeROSE: That would be panel 10B?

MR. BARRETT: That's right.

MR. DeROSE: Okay. But just to understand, it would be your regulatory group that is both looking at whether mitigation is required for the current cost impacts, and also whether mitigation is required or appropriate to mitigate possible future rate impacts, 2020 and beyond? You are sort of looking at both ends of current mitigation and future mitigation?

MR. BARRETT: In the context of preparing and filing rate applications, yes.

MR. DeROSE: Okay. Thank you.

Now, just one other IR that I would like to take you to, and it is under Issue 2.2 and it is actually --

MR. SMITH: Sorry, I missed that, Mr. DeRose.

MR. DeROSE: Sorry. It is under Issue 2.2, and it is CME No. 6. It is Exhibit L, tab 4, schedule 6.

Do you have that, Mr. Barrett?

MR. BARRETT: Yes, I do.

MR. DeROSE: Okay. And the first question I have is with respect to obtaining -- whether OPG obtained specific

approval to seek CWIP recovery from the shareholder.

Your answer at sub (c) is that OPG did not seek shareholder approval of its CWIP in rate base proposal.

Did OPG make the shareholder aware that it was introducing CWIP?

I recognize you don't need explicit approval, but did you make the shareholder aware that there was going to be the introduction of CWIP recovery in this case?

MR. BARRETT: We certainly do provide information on our application and the elements of our application, and I expect that as part of that, we would have indicated that CWIP was part of the application.

MR. DeROSE: Okay. Do you know whether you would have made the shareholder aware that this is something new that has not been applied for in previous cases?

MR. BARRETT: I don't know if we indicated that, or not.

MR. DeROSE: Do you know whether you would have advised that the consequence of this is that there would be $37.9 million more in rates for 2011 and 2012; that there would be that increase compared to if you use the traditional method?

MR. BARRETT: Yes. In fact, I got that specific question from a staff member at the Ministry of Energy.

MR. DeROSE: Okay. And would that question and answer have been in writing?

MR. BARRETT: I think it was by e-mail.

MR. DeROSE: Okay. Is that something that you would

be willing to produce?

MR. SMITH: Why don't we do this? I will try it again. Why don't we do this? I will take a look -- we will produce the portion relating to the Q and A that's been referenced. It has been referenced; that's fine. I am just not sure if there is anything that goes -- that is beyond that in the e-mail, and if there is, then we will obviously have to deal with it accordingly, so subject to that.

I don't know whether there is any part of it that is privileged, irrelevant. I don't know, but -- I don't know what is in the e-mail. I haven't seen it.

MR. DeROSE: I think it is fair that Mr. Smith can review the e-mail and perhaps advise back. My position would be anything in the e-mail related to CWIP should be disclosed, so not just the question and answer on the specific amount, but what we would like to see is: What were the questions and what were the answers and the information provided on CWIP in the e-mail.

So on that understanding, I don't have a problem, subject to Mr. Smith coming back and advising to the contrary.

MR. SMITH: No. That's fine.

MR. MILLAR: J13.1.

UNDERTAKING NO. J13.1: TO PROVIDE QUESTIONS AND ANSWERS AND THE INFORMATION PROVIDED ON CWIP IN THE E-MAIL FROM THE MINISTRY OF ENERGY.

MR. DeROSE: Okay. Now, Mr. Barrett, if I could

then -- we are still at Interrogatory No. 6 from CCC, and I would like to take you to the sub (d). You say:

> "The appropriate level of approval for CWIP in rate base proposal is the OPG board of directors."

Did you provide your board of directors with a specific presentation on CWIP, or was it included in one of your presentations to the board of directors where you describe the CWIP proposal?

MR. BARRETT: It was part of the materials that we provided to the Board through the application approval process, the materials that are subject to a prior panel ruling.

MR. DeROSE: Okay. So, for instance, I went through your presentation to the board of directors on November 19th. This is the presentation that was -- has been put on the record. You are familiar with that?

MR. BARRETT: Can you give me a reference?

MR. DeROSE: It is the -- it is in the CME compendium. One moment. I can...

[Mr. Millar passes document to Mr. DeRose]

MR. DeROSE: Thank you very much. It is CME compendium K9.5.

MR. BARRETT: Yes, I have it.

MR. DeROSE: Okay. If you turn to tab 6 -- just for the record, it is Exhibit F2-1-1, attachment 1.

MR. BARRETT: Yes, I see tab 6.

MR. DeROSE: This is the only presentation to the

board of directors that, in this case, I believe is on the record. You have already alluded to the prior -- to the Board's prior decision; correct?

MR. BARRETT: Yes. This is the nuclear business plan. I think, as we have indicated earlier, we do go to the board with specific -- to seek specific approval for our application, and we talk about issues associated with the application. And that is where we would have talked about CWIP. It wouldn't have been part of the nuclear business plan.

MR. DeROSE: So it is not a surprise that CWIP is not mentioned in this business plan?

MR. BARRETT: It wouldn't be appropriate for it to be mentioned there.

MR. DeROSE: Okay. So I am right that in terms of what is on the record, you have not produced any exchange of information between yourself and your board of directors that addresses the CWIP issue?

MR. BARRETT: Pursuant to the panel's ruling, yes, that's right.

MR. DeROSE: Okay, thank you. Those are all of my questions.

And, Madam Chair, perhaps before my friends from GEC start, with your permission, I would like to be excused, if I can, and I will fly back to my family.

MS. CHAPLIN: That's fine. Thank you.

MR. DeROSE: Thank you very much.

MS. CHAPLIN: Mr. Alexander.

MR. ALEXANDER: Yes, Madam Chair. I am in the Board's hands regarding the afternoon break, as to whether you would like me to begin or if you would like to take the afternoon break now, or if you would like me to -- or what makes the most sense.

MS. CHAPLIN: Why don't you start? Do you still expect to be about a half an hour?

MR. ALEXANDER: I think I will be in the range of 15 minutes to half an hour.

MS. CHAPLIN: Let's go ahead and see if we can complete that before the break.

MR. ALEXANDER: Okay. Before I begin, Madam Chair, the Board should have before it -- it will need the Pollution Probe cross-examination reference Book for OPG panel 6 and 10, which was marked as Exhibit K6.3.

MS. CHAPLIN: We have that now. Thank you.

MR. ALEXANDER: Then the other thing that I will be referring to is a supplementary cross-examination reference book for OPG panel 10 dated October 29th, 2010 that was circulated by e-mail last night, which just contains a couple of short transcript excerpts that have been marked, as well. I believe Board Staff has your copies.

MR. MILLAR: We will call that Exhibit K13.5, Madam Chair, the Pollution Probe supplementary compendium for panel 10.

EXHIBIT NO. K13.5: POLLUTION PROBE SUPPLEMENTARY COMPENDIUM FOR PANEL 10.

MS. CHAPLIN: We have those now. Thank you.

CROSS-EXAMINATION BY MR. ALEXANDER:

MR. ALEXANDER: Thank you, Madam Chair. Good afternoon, panel. My name is Basil Alexander and I am counsel for Pollution Probe, and with me is Jack Gibbons.

MR. BARRETT: Good afternoon.

MR. ALEXANDER: I expect that the answers to most of my questions will be answered by Mr. Barrett, but I will pose the questions and leave it to the panel to decide if both of you should answer or what makes the most sense.

So to start, if I could get you to have a look at the Pollution Probe supplementary cross-examination reference book for OPG panel 10 that's been marked as Exhibit K13.5. Do you have that?

MR. BARRETT: Yes.

MR. ALEXANDER: And if I could take you to page 1 of the supplementary book, you will see that the excerpt that comes after that is an excerpt from the transcript for October 26th, 2010 in this proceeding, specifically volume 11. Do you see that?

MR. BARRETT: I do, yes.

MR. ALEXANDER: Just flipping the page to page 2, I have given you a couple of additional pages for context, but at page 20 of the transcript, there is a portion of my cross-examination of Ms. McShane that is marked from panel 8. Do you see that, starting at line 14?

MR. BARRETT: Yes, I do.

MR. ALEXANDER: And just to read that:

"If the Darlington project is a regulated

project, then regulation brings to the project a degree of protection that a merchant plant doesn't have. And I think the Board well recognized in the last case that merchant generation is a higher risk animal than regulated generation."

I presume you agree with that statement?

MR. BARRETT: Yes.

MR. ALEXANDER: And, in your view, is regulated generation less risky than merchant generation because the regulator may allow the generator to pass some or all of its cost overruns on to consumers?

MR. BARRETT: No.

MR. ALEXANDER: Why not? Why is regulated less risky -- why is regulated generation less risky, in your view?

MR. BARRETT: I think it is broader than that.

In a market circumstance, things may turn against you, despite your best efforts, and you just may be out of luck.

In a regulated context, you have an ability to go back to a regulator and make your case for the recovery of costs that the Board finds just and reasonable. The market doesn't necessarily provide you with that opportunity.

MR. ALEXANDER: So that would allow the generator to pass some or all of its cost overruns on to consumers; correct?

MR. BARRETT: Only if the Board thought that that was just and reasonable.

MR. ALEXANDER: If I could take you to page 5 of the supplementary cross-examination book, which has been marked as Exhibit K13.5; do you have it?

MR. BARRETT: I do.

MR. ALEXANDER: This appears -- this is just the cover page for the transcript, the excerpt of the transcript that follows afterwards in this proceeding for October 19th, 2010, volume 7. Do you see that?

MR. BARRETT: Yes, I do.

MR. ALEXANDER: Flipping the page to page 6 of the document book in Exhibit K13.5, this is page 36 of the transcript, which appears to be Mr. Poch's cross-examination of panel 6.

Do you see that?

MR. BARRETT: Yes.

MR. ALEXANDER: And just starting at line 18 on page 36 of the transcript, page 6 of the document:

> "Mr. Poch: And your graphic suggests that at 8 cents, you pretty much have 100 percent confidence you can do it for 8 cents or less?
> Mr. DeRose: Fairly close, as our Monte Carlo analysis does look at the tails, and the tail, can go on, you know, indefinitely. But it is a small, you know, percentage that it would. It basically says here that, you know, 99.78 percent chance that this project is going to come in under 8 cents."

And I presume you agree with that answer?

MR. BARRETT: The company has very high confidence that the LUEC will be below 8 cents. I don't have any particular expertise in Monte Carlo simulations, though.

MR. ALEXANDER: But you have no reason to dispute that answer?

MR. BARRETT: I know Gary Rose, and he is a very intelligent and careful individual, so if he says that this is true, I have no reason to dispute it.

MR. ALEXANDER: So it appears that OPG's position is that it is confident that there is a 99.78 percent probability that it can successfully complete the Darlington refurbishment project for less than 8 cents per kilowatt-hour, then; correct?

MR. BARRETT: That is our evidence.

MR. ALEXANDER: So what I am trying to understand is why there is there a need for this project to be regulated. For example, why can't you simply do it as a merchant project? Or why can't it proceed by just getting a contract with the OPA to supply electricity to it for 8 cents per kilowatt-hour?

MR. BARRETT: The government has determined that this facility should be regulated, and it has so prescribed in a regulation under the Ontario Energy Board Act.

It is not for the company to take a different approach. We are not able to take a different approach.

MR. ALEXANDER: And it is your position that applies even in the context of the Darlington refurbishment or rebuild?

MR. BARRETT: That's our position.

MR. ALEXANDER: Could you please provide a copy of that regulation that you just referred to?

MR. BARRETT: It is actually in evidence.

MR. ALEXANDER: Mm-hmm?

MR. BARRETT: Let me just turn it up. It is in the As.

MR. SMITH: It is in tab A.

MR. ALEXANDER: You will have to bear with me as I pull it up.

MR. BARRETT: There is a section of the A that deals with the -- it is summary of the legislative framework.

MR. ALEXANDER: Do you have a specific reference?

MR. BARRETT: I am just turning it up.

So it is going to be in A1, tab 6, schedule 1, and it will be one of the attachments. It is attachment 2 in that section.

And if you look at Section 2 in that regulation, you will see there is a list of facilities that have been prescribed pursuant to this regulation

MR. ALEXANDER: Just hang on a second. I am catching up to you to make sure I've got it.

So the list is the prescribed generation facilities.

MR. BARRETT: At section 2, that's right.

MR. ALEXANDER: So just so I understand the company's position, is it your position that all new major investments for Darlington nuclear generation station -- generating station, have to be -- would result in it being

considered regulated and prescribed?

MR. BARRETT: Unless this regulation has changed, then that's correct.

MR. ALEXANDER: Would the company have a problem if the regulation were changed so the rebuild could be done as a merchant generation?

MR. SMITH: With respect, there is no evidence that the regulation is going to be changed at all, so -- particularly during the test period, so I think we are well beyond the realm of the relevant.

MR. ALEXANDER: I think I am entitled to ask the witness a relevant question, because this comes into the various ways this project can proceed.

This is related to the construction work-in-progress and to the CWIP issue, as to the reasonableness and costs.

MS. CHAPLIN: Well, if it is a matter of regulation, does it really matter whether or not the company has a problem with it or not? If the regulation has changed, the regulation has changed, and that will govern their --

MR. ALEXANDER: I understand that point. What I want to know is if the company would not have a problem if that happened. That is all I want to know, if there might be some other reason as to --

MS. CHAPLIN: Well, they might have a problem, but I don't see -- it really won't matter if they have a problem, if that is what the regulation says; right?

MR. SMITH: We're out of luck.

MR. ALEXANDER: I will move on. Has the government of

Ontario issued a directive or regulation that requires the Board to include the capital costs associated with the Darlington refurbishment in rate base?

MR. BARRETT: By "Board" do you mean the Ontario Energy Board?

MR. ALEXANDER: Yes.

MR. BARRETT: I am not aware of any such regulation. I mean, the Board has, as you know, issued a report, EB-2009-0152, indicating that in certain circumstances, in certain cases, it believes that CWIP in rate base is appropriate to deal with issues like rate shock and impacts on utility debt costs.

MR. ALEXANDER: I understand that is your position, but I think the focus of my question was on the government of Ontario. And I think your answer was you are not aware of anything.

MR. BARRETT: I am not aware of any.

MR. ALEXANDER: Now, in order for the Board to determine whether or not the costs of the Darlington refurbishment should be included in rate base, and is in the public interest, would you agree with me that the Board has to do the two following -- has to make the two following findings?

First, that OPG's cost estimates for the refurbishment are reasonable and credible.

I will ask them in turn.

MR. BARRETT: I think that is fair.

MR. ALEXANDER: Then the second one is that there

is -- that there are no viable alternatives that can meet Ontario's base load electricity needs at a lower cost and a lower risk?

MR. BARRETT: I don't think that is required.

MR. ALEXANDER: Could you explain why you don't think that is required?

MR. BARRETT: This is not an integrated resource planning exercise.

We're coming forward with a proposal that has been endorsed by our board and endorsed by the government and supported by the OPA, seeking to have certain costs placed into rates.

The Board, in placing certain costs into rates, use a just and reasonable standard, but I don't think that engages, necessarily, a system planning exercise.

MR. ALEXANDER: Well, that sort of ties into my next question.

Wouldn't you agree with me that the appropriate forum to discuss those and other issues, for the Board to investigate those issues, would be the proceeding to review the OPA's integrated system power plan?

MR. BARRETT: No, I would not.

MR. ALEXANDER: Why not?

MR. BARRETT: Well, I think I indicated earlier the project has been endorsed by the province. We are proceeding with the project.

So I am not sure that there is any value in waiting until the integrated resource planning process is concluded

in a couple of years. Certainly we are proceeding with the project.

MR. ALEXANDER: I think I will come back to some of that in a second, but if I can get you to now take out the Pollution Probe cross-examination reference book for panels 6 and 10, dated October 18th, 2010, which was marked as Exhibit K6.3; do you have that?

MR. BARRETT: I do, yes.

MR. ALEXANDER: If I could take you to tab 1 of Exhibit K6.3, and this is the -- a report by the Darlington rebuild -- this is a report by the Ontario Clean Air Alliance Research Inc. entitled "The Darlington Rebuild Consumer Protection Plan."

Do you see that?

MR. BARRETT: I do see that.

MR. ALEXANDER: Flipping to page 2 of the document book, page 1 of the report, do you have that?

MR. BARRETT: I do, yes.

MR. ALEXANDER: And on the left-hand column in the fourth paragraph, there are some portions that have been marked and underlined. Do you have that?

MR. BARRETT: I do.

MR. ALEXANDER: So just to read this:

> "In 2014, OPG's management will 'revise its feasibility assessment, establish the project scope, cost and schedule' and seek approval from its board of directors to proceed with the Darlington rebuild 'assuming that the economics

of the project remain favourable'."

Would you agree that that is accurate?

MR. BARRETT: No, it is inaccurate.

MR. ALEXANDER: Okay. I will ask you to explain that, because the end note I believe is based on -- the quotes, I believe, are based out of your evidence. So --

MR. BARRETT: Yes. If you look at the end note, it references Exhibit D2, tab 2, schedule 1, page 10. And if you turn to that -- I will give people a moment.

So if you look at page -- sorry, page 10, lines 7 through 10, you will see that the paragraph in your document does not represent our evidence accurately.

What our evidence says is as follows:

"In 2014, OPG will revise its feasibility assessment, establish the project scope, cost, and schedule and prepare a recommendation to the OPG Board to proceed to the execution phase of the project, assuming that the economics of the project remain favorable."

And I think the omission of the words "execution phase" in your document misrepresents, to a degree, what we're saying here in our evidence.

As we have discussed this project, there are a number of gates which have releases associated with them, and this is one of those gates and releases.

MR. ALEXANDER: Without that approval or authorization, OPG cannot proceed with actually rebuilding Darlington nuclear station; correct?

MR. BARRETT: I think we have been clear that there are a series of releases. While we expect the project to proceed and proceed on the schedule and costs that we have indicated, we're managing the project in a way that will allow us to continue to refine our numbers, do all of the requisite planning and scheduling, and there are places where we have to get subsequent approvals.

MR. ALEXANDER: And this is one of them. So without board of directors' approval here, you can't actually rebuild Darlington nuclear station; correct?

MR. BARRETT: We will not proceed to the execution phase until we get through this gate.

MR. ALEXANDER: So you can't rebuild it, then, unless you --

MR. BARRETT: I think that follows, yes.

MR. ALEXANDER: Has the Minister of Energy or the government of Ontario endorsed your CWIP proposal?

MR. BARRETT: We haven't sought their endorsement or approval.

MR. ALEXANDER: So to your knowledge, they have not endorsed your CWIP, the CWIP proposal?

MR. BARRETT: To my knowledge, they have not.

MR. ALEXANDER: If I could take you to tab 11 of the Pollution Probe cross-examination reference book for OPG panel 6 and 10, which was marked as Exhibit K6.3. Do you have that?

MR. BARRETT: Sorry. Did you say page 11?

MR. ALEXANDER: Tab 11.

MR. BARRETT: Tab 11.

MR. ALEXANDER: It will be page 32. Sorry, I presumed you had the tabbed versions. Do you have that?

MR. BARRETT: Yes. That is Exhibit D2, tab 2, schedule 2, from our evidence.

MR. ALEXANDER: Yes, I was about to say that. This is an excerpt from D2, tab 2, schedule 2. Just flipping ahead to page 34, which is page 3 of the evidence at Exhibit D2, tab 2, schedule 2, do you have that?

MR. BARRETT: I do.

MR. ALEXANDER: There is a marked portion starting at line 7, under 4.0, "Proposed Regulatory Treatment". Just reading that:

> "Inclusion of CWIP in rate base for the Darlington Refurbishment project is warranted since it meets the criteria for qualifying investments specified by the OEB in its Report."

I presume that is still correct and that is the company's position?

MR. BARRETT: It is still correct.

MR. ALEXANDER: And the report that you are referring to is the EB-2009-0152 report of the Board entitled, "The Regulatory Treatment of Infrastructure Investment In Connection With The Rate-Regulated Activities of Distributors and Transmitters in Ontario"; correct?

MR. BARRETT: Yes, sir, that's correct.

MR. ALEXANDER: Just going according to the title of the report, it is with respect to distributors and

transmitters; correct?

MR. BARRETT: The focus of the report is on the distributors or transmitters, but, as we've indicated in response to a number of interrogatories, we read the report as providing, on a case-by-case, the ability for other utilities to access the alternative regulatory mechanisms that are described in the report.

MR. ALEXANDER: I understand that is your position. I think that is a matter for argument, but OPG is not a distributor or transmitter; correct?

MR. BARRETT: That is correct.

MR. ALEXANDER: And electricity distribution and transmission is a natural monopoly; correct?

MR. BARRETT: Yes, that's right.

MR. ALEXANDER: And OPG is an electricity generator; correct?

MR. BARRETT: In terms of these assets, a regulated electricity generator.

MR. ALEXANDER: But so it is an electricity generator, then, obviously.

And is electricity generation a natural monopoly?

MR. BARRETT: No. I think what we've -- well, let me step back. There are circumstances where you could have a vertically integrated monopoly which has generation in it, and that was the structure of the industry for many years.

In the Ontario context, because we have a market, electricity generation is not a natural monopoly.

MR. ALEXANDER: Has the Board ever stated that the

findings of the EB-2009-0152 report should also apply to electricity generators?

MR. BARRETT: That is our reading of the report.

MR. ALEXANDER: Have they said -- I realize you referred to certain -- you've referred to -- could you provide the references as to why that justifies your reading of your report?

MR. BARRETT: There was an interrogatory on that. Do you want me to turn it up?

MR. ALEXANDER: That would be helpful, if you could.

MR. BARRETT: There was a Board Staff interrogatory, and that is Exhibit L, tab 1, schedule 11.

MR. ALEXANDER: Do you have an issue number for that?

MR. BARRETT: It is issue 2.2.

MR. ALEXANDER: Exhibit L, tab 1, schedule 11?

MR. BARRETT: Exhibit L, tab 1, schedule 11; that's right.

MR. ALEXANDER: I have that. I am waiting for you to take me to which of the specific references.

MR. BARRETT: Oh, I'm sorry. I thought there was going to be a question.

MR. ALEXANDER: No.

MR. BARRETT: So if you see our response, we reference two statements by the Chair, the first one made in April 3rd, 2009 and one made later in June 2009, and these kick-started the process that ultimately led to the report. And the second one is -- second statement by the Chair is actually referenced in the report.

In terms of the first statement by the Chair, the Chair, in discussing why the initiative was started, indicated that:

> "The magnitude of current and future utility infrastructure investment has led me to consider how the OEB could create conditions which would foster timely investment by utilities in required infrastructure.'"

And certainly we're a utility. We're looking at significant infrastructure investments that are necessary for the province of Ontario. So we would see ourself captured under that description.

In the second statement by the Chair on June 1st, 2009, which is referenced in the infrastructure report at page 2, the quote is:

> "The cost recovery initiatives will consider more innovative approaches to cost recovery for electricity infrastructure projects. Availability of the mechanisms will be associated primarily with investments relating to the accommodation of renewable generation and smart grid development. The cost recovery mechanisms developed through this initiative may also be available in relation to other types of projects in appropriate circumstances."

And we see our Darlington refurbishment as being one of those other types of projects.

MR. ALEXANDER: So just to be clear, both of these

statements are before the report, because the report itself is dated January 15th, 2010; correct?

MR. BARRETT: Yes. But the second one, the second statement by the Chair is included in the report at page 2.

MR. ALEXANDER: No, I understand that.

And just going to the first statement, you would agree with me that when the Board or a Board Member uses the term "utilities" don't they usually refer to transmitters and distributors?

MR. BARRETT: I can't speak for what the Board usually means. I understand the word "utilities" in the Ontario context to mean rate-regulated companies, which would include OPG's regulated assets.

MR. ALEXANDER: So your view is that you are included in that, even though common parlance -- even though it might -- even they it is usually referred to as "utilities" and –- sorry, it is usually referred to transmitters and distributors?

MR. BARRETT: We certainly consider that part of our business to be akin to a rate-regulated utility.

MR. ALEXANDER: Are those the only two references you can refer me to?

MR. BARRETT: There are other references in the report that I can probably find with sufficient time. I think they all turn on this same kind of parallel, but --

MR. ALEXANDER: I will be clearer as to what I am looking for.

Can you refer me to any references after the report

was issued that indicates that this report should also apply to electricity generators?

MR. BARRETT: I don't think there is any reference in the report to the words "electricity generators" and I am not aware of any subsequent statements by the Board that have talked about this report.

But just to be clear -- and it may or may not be helpful -- we are -- we see our situation in respect of the Darlington refurbishment to be logically consistent with the things that, as we read the report, caused the Board to endorse CWIP in rate base for utility projects.

There, they acknowledged developments in other parts of the industry, in particular FERC and in the U.S. They acknowledged that CWIP in rate base is a way of dealing with rate shock, and that is an issue that we have foursquare with respect to the Darlington refurbishment. They recognize the potential impact on utility credit metrics, and that is an issue that we face.

So logically, the same kind of analysis that the Board brought to bear in this report, in terms of approving CWIP in rate base, should apply to our project. That is how we see things.

MR. ALEXANDER: I understand your position, and I think that is a matter for argument, at the end of the day. But I think the answer to my question is no?

MR. BARRETT: If you could just restate the question?

MR. ALEXANDER: After the report was issued, the Board has not stated that the findings of the report should also

apply to electricity generators?

MR. BARRETT: As far as I know, they haven't stated that it should or should not.

MR. ALEXANDER: You are aware that the Ontario Power Authority has signed over 400 electricity supply contracts with renewable and natural gas-fired power producers?

MR. BARRETT: I know they have signed a lot. I have no idea whether it is 300, 400 or 500.

MR. ALEXANDER: But you wouldn't dispute that number, that it is over 400?

MR. BARRETT: I have no reason to agree with it or disagree with it. They certainly have signed many.

MR. ALEXANDER: I understand that.

And these contracts don't allow renewable or gas-fired power producers to recover some of their costs from electricity consumers before their projects are completed and generating electricity; correct? You would agree with that?

MR. BARRETT: I am not very familiar with their contracts, so I can't give evidence on that one way or the other.

MR. ALEXANDER: You have no reason to dispute that, though?

MR. BARRETT: I have no basis to agree with it or disagree with it.

MR. ALEXANDER: Assuming that is true, why does OPG believe that the Darlington refurbishment project should be given a special advantage by including CWIP, which the OPA

has not awarded to any renewable or gas-fired power producer?

MR. BARRETT: Well, none of those projects are rate-regulated projects, rate-regulated by this Board.

And so it is not an apples-to-apples comparison on any basis.

And certainly, if you look at the publicly-released information on pricing under those agreements and some of the terms, the pricing is quite advantageous and quite generous relative to the rates that we are proposing in this application.

So I don't think it is an apples-to-apples comparison.

The Board has said in EB-2009-0152 that in certain circumstances, CWIP in rate base is going to make sense, and it is just our position that Darlington, given that it is the largest capital project in the province, probably the longest term for execution of that project, is the poster child for CWIP in rate base.

MR. ALEXANDER: However, to date neither OPG's -- OPG's board of directors, as we discussed earlier, has not approved -- you don't have -- let's try that again.

To date, however, you don't have authorization to actually approve with the actual rebuilding of Darlington nuclear station; correct?

MR. BARRETT: We have approval to proceed. We have a series of gates that we have to move through.

But we have very high confidence that the project will proceed as we have laid it out.

MR. ALEXANDER: I understand you have very high confidence, but you don't have actual authority to do the rebuild right now; correct?

MR. BARRETT: We do not have the final release for the execution of the project. That happens, as we have discussed, in 2014.

MR. ALEXANDER: And neither the Ministry of Energy nor the Board has approved proceeding with the actual rebuilding of the Darlington nuclear station; correct?

MR. BARRETT: We have an endorsement for proceeding with the project from the government. And that is as evidenced in our letter.

And when you use the word "Board" in your question, I take it you're referring to the Ontario Energy Board?

MR. ALEXANDER: Yes, I am.

MR. BARRETT: We haven't received any approval from the Ontario Energy Board in respect to the project.

MR. ALEXANDER: But you don't have approval to actually rebuild from the ministry or the Minister of Energy to proceed with the actual rebuilding of Darlington nuclear station; correct?

MR. BARRETT: We have approval to -- or an endorsement of our plan to proceed as we have laid it out. So approval -- what we have laid out is a release strategy. We have laid out the timing of the project. We have provided information on the ultimate costs, the schedule.

And we see the letter from the minister, speaking on behalf of the province, as endorsing all of that.

MR. ALEXANDER: But you don't have approval to actually rebuild Darlington; correct?

MR. BARRETT: We have not gone through the gate which would release the execution funds.

MR. ALEXANDER: So you can't -- you don't have authorization to do it, then; correct?

MR. BARRETT: We have not gone through the gate which would allow the execution of the final funds.

MR. ALEXANDER: Has a North American energy regulator ever approved a CWIP proposal for an electricity generation project before it has determined that it is in the public interest to proceed with the construction or the refurbishment of the electricity generation project, to your knowledge?

MR. BARRETT: To my knowledge, no. And I can ask Mr. Luciani to speak later.

That said, we take the endorsement from the minister as an indication that the project is in the public interest.

I would say that --

MS. CHAPLIN: Sorry, I just want to make sure I hear you, Mr. Barrett.

MR. BARRETT: Yes.

MS. CHAPLIN: As an indication? Or as a... is that what you said?

MR. BARRETT: Well, let me use better words.

MS. CHAPLIN: I'm sorry, I didn't mean to interrupt you, but perhaps if you could start again to answer that

question?

MR. BARRETT: The minister, speaking on behalf of the project, has endorsed our plans for proceeding with the refurbishment of the Darlington plant.

We take that endorsement of our plans as an indication -- or a determination by the province that proceeding is in the public interest, because I think the logic is that the minister or the province would not be endorsing something they thought was contrary to the public interest.

I think, to be fair, that we would not say that public interest determination by the province is binding on the Board, but we believe that the Board should give it significant weight in its own determination of what is in the public interest.

MR. ALEXANDER: I think the latter part of your answer will be a subject for argument, but I think the first part of the answer was no.

And I believe the other panellist might have -- I don't know if he has anything to add to that.

MR. SMITH: His answer was what it was, and that will be reflected on the record.

MR. ALEXANDER: Would you like me to repeat the question? Would that be helpful, or do you know what the question was?

MR. LUCIANI: Please go ahead.

MR. ALEXANDER: Has a North American energy regulator ever approved a CWIP proposal for an electricity generation

project before it has determined that it is in the public interest to proceed with the construction or the refurbishment of the electricity generation project?

MR. LUCIANI: I will frame your question to recent history. When you say "ever", over the last 100 years of electricity regulation I am sure some things may have happened. We had some CWIP decisions after the nuclear plant was already in place, and so on.

MR. ALEXANDER: And to be clear, I am asking to your knowledge.

MR. LUCIANI: Yes. As far as these recent examples in these various states, my understanding is that, as a general matter, the commission has found proceeding with the plant to be a reasonable approach.

MR. ALEXANDER: So it has not been before the finding of public interest; correct? It would have been after that finding?

MR. LUCIANI: As a general matter, I think they are usually done at the same time.

MR. ALEXANDER: Thank you, panel.

Thank you, Madam Chair. Those are my questions.

MS. CHAPLIN: Thank you, Mr. Alexander. We will take the afternoon break now for 15 minutes.

--- Recess taken at 3:11 p.m.

--- On resuming at 3:33 p.m.

MS. CHAPLIN: Please be seated.

Mr. Crocker?

I think the parties are agreed that we will try to

ensure we cover any questions that are remaining for Mr. Luciani between Mr. Millar and Mr. Crocker and the Panel, so that we can ensure he is completed today. I gather this is acceptable to all of the parties?

MR. SMITH: Yes, and very much appreciated. Thank you.

MS. CHAPLIN: No problem.

MR. CROCKER: Madam Chair, I wonder whether we could mark as an exhibit, first of all, the compendium that we have prepared.

MR. MILLAR: Madam Chair, this will be K13.6. It is the AMPCO compendium of materials for panel 10.

EXHIBIT NO. K13.6: AMPCO COMPENDIUM OF MATERIALS FOR PANEL 10.

MR. CROCKER: I should say, Madam Chair, there isn't much left for us that others haven't already covered, as you can see from the reference material there. So I don't expect to be very long.

CROSS-EXAMINATION BY MR. CROCKER:

MR. CROCKER: The first area I wanted to cover has already been covered by Mr. Warren. That is the sort of broader American experience, Mr. Luciani.

I'm sorry for not introducing myself. My name is David Crocker. I am cross-examining on behalf of AMPCO.

The first area, as I say, I indicated Mr. Warren has already covered, but in the material that we have provided, the first 16 pages deal with a bill in the state of Missouri, where CWIP is prohibited.

And it displays the history of a bill which was intended to modify the existing bill to allow CWIP, which ultimately was abandoned. And that is what this material covers.

I won't go into it in any detail. I don't think it is necessary after Mr. Mr. Warren's cross-examination. I just wondered whether you were familiar with it.

MR. LUCIANI: I have seen reference to it, but not familiar with the intimate details of the proposed legislation.

MR. CROCKER: You are aware, however, that the legislation was an attempt to modify circumstances in Missouri to allow CWIP, and it was unsuccessful?

MR. LUCIANI: Yes, that's correct.

MR. CROCKER: Okay. I won't go into the Board's report, and I won't go into the factors.

Talking merely about smoothing, quickly, as you have indicated earlier, the Darlington refurbishment is in four stages; that's correct, isn't it?

MR. BARRETT: Are you talking about with reference to four units coming in-service at different points in time?

MR. CROCKER: Yes.

MR. BARRETT: Yes, there are.

MR. CROCKER: Right. And on page 24 of the material that we have provided, 23 and 24, which is D2, tab 2, schedule 2, and we are talking about pages 6 and 7, just to make it clear, the smoothing that you are suggesting CWIP accomplishes would be the difference in the amounts of

money shown between the dotted line and the solid line on these graphs; that's correct, isn't it?

MR. BARRETT: Yes, that is an illustration of it.

MR. CROCKER: All right. If you could turn to page 28 of the compendium, which is Exhibit L, tab 2, schedule 5, AMPCO Interrogatory 5, we asked you to do a net present value of the impact of CWIP on revenue requirements.

As I read table 1, with either of the two weighted average cost of capital figures provided, at either of the two capital costs provided, and these are your figures, your answer to our question, CWIP is not a benefit in any of the circumstances described there, is it?

MR. BARRETT: I wouldn't agree that it is not a benefit.

I would accept that the net present value is higher in the circumstance that you have CWIP, and that is simply a function of the fact that under the current methodology, OPG would only earn its debt rate during the period of time when the project is -- the plants are being refurbished prior to coming in-service, rather than the weighted average cost of capital, which you would get under CWIP.

So if effect, what you're seeing here in terms of the difference in the net present values is really the subsidy that is being provided during the financing period by OPG.

MR. LUCIANI: I will note, just in passing, in the U.S., of course, the AFUDC rate is generally based on the cost of capital itself. It wouldn't be simply a debt rate, which would be -- that would be non-compensatory.

The cost of capital, the weighted average cost of capital is used for the AFUDC rate in the U.S., as a general matter.

MR. CROCKER: I will live with those answers. Thank you.

You had a discussion with Mr. Poch and with Mr. Shepherd about the benefits to the ratepayers of CWIP, and I just want to confirm that in your analysis of the benefits of CWIP, you didn't analyze the position of the individual ratepayers in that determination.

Did you? In order to arrive at the benefits of CWIP, you didn't take into consideration the position of the ratepayer?

MR. BARRETT: No, I wouldn't agree with that.

The significant benefit to ratepayers is the mitigation of rate shock that they will see down the road, so that I would see as a benefit to ratepayers that we have taken into account.

MR. CROCKER: All right. Well, that has been discussed, but in terms of the position of the ratepayer, the position of the ratepayer didn't factor in significantly, I suggest to you, in your analysis, did it?

MR. BARRETT: I would disagree with that, sir, with respect.

MR. CROCKER: Well, okay. I didn't want to go to this specifically, but -- I didn't think we had to.

But if you look at page 29, we have excerpted a discussion from the Technical Conference that Mr. Shepherd

had with you. And Mr. Shepherd asks at line 6:

"So, then, the analysis in the 550 million number assumes that the ratepayers' cost of capital is zero; is that correct?"

"I don't think you can say that."

is your answer. And Mr. Shepherd goes on:

"Okay. It doesn't assume a cost of capital for ratepayers?

"Mr. Barrett: I'm sorry?

"Mr. Shepherd: It doesn't assume a cost of capital for ratepayers?

"Mr. Barrett: That's not the way the question is focussed. The question is focussed on cash flow of OPG.

"Mr. Shepherd: Thank you."

I'm suggesting that that exchange and that your answer to Mr. Poch and to Mr. Shepherd was that the position of the ratepayer, with respect to the ratepayers' cost of capital, for instance, and whether their cost of capital is higher, would be higher, those issues weren't factored into your analysis?

MR. BARRETT: We did not factor into our analysis the costs of capital for ratepayers. We don't know what that is, to be honest with you.

That starts to engage discussions like the use of social discount rates, which I know the OPA has advanced in its IPSP and has been the subject of some discussion in Hydro One proceedings, and I know the Board has basically

indicated it's agnostic about the use of social discount rates.

But we are not using social discount rates in our analysis. We simply used OPG's cost of capital in respect of the NPVs.

MR. CROCKER: Okay. That is the answer to my question. Thank you.

If you could turn to page 32 of the compendium, this is a National Regulatory Research Institute report that Mr. Luciani footnotes in his report, and it is referred to in OPG's material.

If you could flip over the page, to page 33, the last three lines before the line with the footnote, the last three lines on the page say:

> "Because pre-approvals reduce utility risk, commissions awarding some form of pre-approval cost recovery should consider whether a corresponding reduction in the utility's authorized return on equity is appropriate."

Are you asking for a reduced return on equity if your CWIP proposal is approved?

MR. BARRETT: No. My understanding is the evidence of Mrs. McShane, who is our cost of capital expert, indicated that refurbishment, in her view, was an incremental risk, and the approval of CWIP would be a way of addressing that incremental risk. And we agree with her assessment of the situation.

MR. CROCKER: Your answer to the question was "no" to

begin with.

MR. BARRETT: Sorry, if I wasn't clear, no, are we seeking a reduction in ROE, nor are we seeking an increase in respect of the Darlington refurbishment project, just to be clear.

MR. CROCKER: Right. And the reason why it makes sense to -- I suggest to you, to consider asking for a reduced return on equity is that the risk, the theoretic risk, of the project is diminished if CWIP is approved. That's correct, isn't it?

MR. BARRETT: Certainly during the refurbishment and definition phase, the company's financial metrics will be better, so the financial risk will be reduced. But there is other risks that are attendant to a refurbishment project, particularly one of this size and scale.

MR. CROCKER: If you were given an alternative, CWIP or a reduced return on equity, which would you rather?

MR. BARRETT: What size of reduction of ROE are we talking about? Obviously, the company would -- if it had to choose between door A and door B, it would take the one that put itself in the best position. But I don't think that is the situation here. Certainly that is not the company's proposal.

MR. CROCKER: Thank you, Madam Chair. I have nothing further.

MS. CHAPLIN: Thank you.

Mr. Millar.

MR. MILLAR: Yes. Thank you, Madam Chair.

CROSS-EXAMINATION BY MR. MILLAR:

MR. MILLAR: I will ask questions that may require a response from Mr. Luciani first, and then I will proceed with the rest of my cross. If I get carried away in the excitement of CWIP cross and we are getting close to 4:30, please do interrupt me so the panel may ask any questions they have of Mr. Luciani, and he may leave.

I have put together a very brief booklet of documents for this cross-examination. These are -- the documents in this booklet are not on the record, although most of them are referenced in the record or will be very familiar to at least Mr. Barrett, if not Mr. Luciani.

I propose we call that Exhibit K13.7.

EXHIBIT NO. K13.7: BOARD STAFF BOOKLET OF DOCUMENT FOR CROSS-EXAMINATION OF OPG PANEL 10.

MR. MILLAR: I would like to start with some questions relating to Mr. Luciani's report, and perhaps if I could ask the panel -- I'm sorry, panel. My name is Michael Millar. I am counsel for Board Staff. I neglected to introduce myself.

If I could ask you to turn to page 12 of your report? And if you look under 3.4.2, there is a section entitled, "Risks of Construction". It reads:

> "Recovery of CWIP in rates is sometimes said to transfer risk from the utility to its customers."

Then if you skip down a sentence, it states:

> "This argument perhaps has more validity if regulatory agencies are not reviewing utility

investment plans prior to construction. With such reviews in place, the utility is unlikely to proceed with construction without regulatory agency guidance. This process mitigates the risk that the utility is planning construction of an asset that the customers may not want or is not expected to be economic."

Do you see that?

MR. LUCIANI: Yes.

MR. MILLAR: And, Mr. Barrett, or, Mr. Luciani, if you wish to answer, I am not sure if it is in direct response to that, but OPG is proposing certain reporting with relation to the Darlington refurbishment; is that correct?

MR. BARRETT: Yes.

MR. MILLAR: And I am looking at D2, tab 2, schedule 2, page 9. I don't know if you need to turn it up, but maybe you can confirm for me that OPG plans possibly two forms of reporting. The first would be through the biannual rates cases; is that correct?

MR. BARRETT: Yes. We would expect that there would be a significant amount of information filed in that proceeding.

MR. MILLAR: Then I understand in alternating years you would be providing an annual monitoring report, or you would propose to do that?

MR. BARRETT: If the Board found that acceptable and helpful.

MR. MILLAR: Okay. So that is something you would be

willing to produce?

MR. BARRETT: Yes.

MR. MILLAR: What would be in that report?

MR. BARRETT: We haven't specified that. It really would be a function of the Board's needs in respect of its monitoring activities. I think what we have indicated in the evidence is the best way to proceed is to have -- if the Board would like that kind of a report, to have subsequent discussion with Board Staff about the timing and specifics of the report.

MR. MILLAR: So not necessarily something ordered through this proceeding?

MR. BARRETT: I think it would be difficult to order the specifics. Certainly the Board could -- it would be -- my advice to the Board order, if it wanted a monitor report, that it order a monitoring report and give general guidance in terms of the stuff in there, and leave it to subsequent discussions to refine that.

I think our general position would be that the report, it would be better if the report draws on information that we naturally collect as part of our own management of the project, rather than creating information that we may or may not use for business purposes. There might be some efficiencies, again, through that.

MR. MILLAR: If we were -- if someone were to suggest that the reporting should include more or less the level of detail of information you would provide in your rate cases, would you have a view on that? Is that too much, or would

you be happy to provide that?

MR. BARRETT: You're not talking about six volumes of material?

MR. MILLAR: No. No. Specifically with relation to the Darlington project, of course.

MR. BARRETT: I don't think we would have an objection, again, subject to working out the details and timing.

MR. MILLAR: Of course. That's fair enough. Thank you.

Now, Mr. Barrett, this has been gone over fairly thoroughly, but of course you are not seeking the Board's approval for the Darlington refurbishment; is that correct?

MR. BARRETT: No. As I have indicated, I am not sure how we would do that or if we could do that.

MR. MILLAR: We may get to that in a moment. I have taken my cross a little bit out of order to accommodate Mr. Luciani.

MR. BARRETT: Sure.

MR. MILLAR: But how will reporting assist the Board if the Board isn't being called upon to approve anything? What will reporting do?

MR. BARRETT: Well, the Board is being called upon to approve things. They are being called upon to set payment amounts that reflect the costs related to the project.

Those are the CWIP costs in one bucket, and the other things which are shown in chart 1 at the beginning of -- at Exhibit D2, tab 2, schedule 1, page 3 of 17.

MR. MILLAR: The vast bulk of the costs come at the end of the process, is that fair, the capital costs for the Darlington refurbishment?

MR. BARRETT: There was capital throughout the definition and execution phase.

I would agree I think there is probably more capital in the execution phase than in the definition phase. So it is back-end loaded in that respect.

MR. MILLAR: But CWIP aside, I assume you won't be seeking to close those amounts into rate base until the project is up and running?

MR. BARRETT: Setting aside CWIP?

MR. MILLAR: Yes.

MR. BARRETT: Yes. If the Board decides that CWIP is not appropriate in this circumstance and that we should use the traditional methodology, then the capital costs won't come into the revenue requirement until the asset comes into service.

MR. MILLAR: Well, maybe I can simplify this. From your point of view, is the reporting only useful to the Board in the context of considering CWIP and the amounts it will be closing to rates in any given year?

MR. BARRETT: I think that is where it is most useful.

MR. MILLAR: Mr. Luciani, to go back to your report, the passage I just read you, you state that the fear of a transfer of risk from utilities to customers is somewhat alleviated with proper reporting. That is what I just read to you?

MR. LUCIANI: Yes.

MR. MILLAR: And you state, in particular, and I am reading the same sentence:

> "This argument perhaps has more validity if regulatory agencies are not reviewing utility investment plans prior to construction."

From what you have heard here today, OPG isn't seeking approval for the project itself; is that right? Well, we know that, because he has been asked that about 100 times. But how does this fit in with what you have written here?

MR. LUCIANI: My perspective, of course, is from the U.S. perspective, where the utility commission generally is one actor dealing with the investor-owned utility, and so we will review those plans, and so on.

All the nuances of Ontario, it is somewhat different, as I understand it, with the OPA's involvement and the -- and so on.

So my understanding, in listening to Mr. Barrett, is the essence of a review has taken place and will take place on an ongoing basis.

My perspective here was more from the U.S. perspective, where it is one regulatory -- the regulatory commission doing all of that.

MR. MILLAR: Okay. To be clear, I just want to explore the extent to which we can discount the idea that risk is being transferred from utility to customers, and I just want to look at the reasons you have given where a regulatory oversight may alleviate that concern.

MR. LUCIANI: Sure.

MR. MILLAR: If we look at the next sentence, you state:

> "With such reviews in place, the utility is unlikely to proceed with construction without regulatory agency guidance."

In this case, OPG is not seeking a review or agency guidance, are they?

MR. LUCIANI: From the Ontario Energy Board?

MR. MILLAR: From the Ontario Energy Board.

MR. LUCIANI: I think, as Mr. Barrett explained, that they are asking for a -- approval of various factors having to do with the recovery of the investment.

MR. MILLAR: CWIP, and then there is a few --

MR. LUCIANI: Yes.

MR. MILLAR: -- what I would characterize as relatively minor OM&A costs in the definition phase. But not for the refurbishment itself?

MR. BARRETT: Sorry, if I could just interject, there are a number of other cost consequences that flow from proceeding with the Darlington project beyond CWIP and the related O&M costs.

And I think we have gone over this, but there are changes to ARO, there are changes to depreciation, there are changes to tax, there are changes to Bruce.

So I just don't want to leave you with the mistaken impression there is just two cost elements that the Board has to turn its mind to.

MR. MILLAR: That's fair enough. But just as there are some elements that the Board is being asked to turn its mind to, there are many that the Board is not being asked to turn its mind to.

You are not seeking approval from this Board to go ahead with the Darlington refurbishment?

MR. BARRETT: That's correct.

MR. MILLAR: So in that context, Mr. Luciani, does the paragraph I have just read to you does that apply here to this situation with OPG?

MR. LUCIANI: And again, not knowing all of the nuances of how projects are approved in Ontario, I think it does apply. To my knowledge, there was a case made, and it was approved by the relevant governing body for that type of decision.

That's my inference from what Mr. Barrett has been explaining.

MR. MILLAR: Okay. I guess the record will say what it says. And thank you for your answer.

I would like to ask a few questions. I will be referring to Mr. Luciani's report. I think my questions are more for Mr. Barrett, but I will ask this at the front end, so Mr. Luciani can chime in if he wishes.

Some questions about the specific capital costs you are seeking to recover through CWIP.

As we have already heard, Mr. Barrett, you are seeking to recover the full cost of capital on CWIP; is that right? Your weighted average cost of capital?

MR. BARRETT: Yes, that's right.

MR. MILLAR: So debt and ROE?

MR. BARRETT: That's right.

MR. MILLAR: In Mr. Luciani's report, at page 8, under 2.3: "Canada" -- I think he is discussing some examples in other proceedings -- he says there's been recent activity regarding the inclusion of CWIP in rate base in two Canadian provinces.

And then he -- you see Ontario, and he references the Hydro One decision. You are familiar with that decision? Mr. Barrett?

MR. BARRETT: Yes, I am.

MR. MILLAR: Okay. Mr. Luciani obviously is as well, since it is in his report. I think everyone here knows what that case is about, so I don't intend to go over the details.

But first of all, my understanding is that Hydro One is only recovering its debt costs from the CWIP in this case; is that correct?

MR. BARRETT: That's my understanding.

MR. MILLAR: And of course, Hydro One was asked, for example, in an interrogatory from -- was it AMPCO –- regardless, you were asked if you considered any other regulatory treatments or any other cost of capital parameters you might consider.

Your answer was no, but I take it it is still your position you should recover your full cost of capital, as opposed to just debt?

MR. BARRETT: Consistent with the Board's report in EB-2009-0152.

MR. LUCIANI: And again, I will note from a U.S. perspective, an AFUDC rate with a carry of only the debt interest is non-compensatory, and it is not done in the U.S., as a general matter.

MR. MILLAR: Would you agree with me, obviously, the Board will look at precedents from all jurisdictions, but I would suspect it would look at its own jurisprudence before it would look abroad?

MR. LUCIANI: It might. It might.

MR. MILLAR: Okay. I would also put to you Hydro One -- to some extent, we are suggesting that the Board might consider only applying debt charges to CWIP, but at the same time, Hydro One is sort of a unique case. And I don't know if you know all of the details, but let me ask you a couple of questions.

I understand that Hydro One did not capitalize or put into rate base CWIP during the actual construction of the transmission line. Does that match your understanding?

MR. BARRETT: You are referring to the Niagara line?

MR. MILLAR: Yes.

MR. BARRETT: Yes. That option wasn't available to them, as far as I understand it.

MR. MILLAR: Because it was pre the report?

MR. BARRETT: Yeah. It wasn't consistent with the methodology that the Board was employing at that time.

MR. MILLAR: Okay. It was only when these

difficulties with some underlying land claim issues arose that Hydro One sought this treatment, and was granted this treatment?

MR. BARRETT: That's my understanding.

MR. MILLAR: Okay. Madam Chair, if it assists, I think those are all of the questions that I have for Mr. Luciani. That being said, he may have some input on some additional questions I have, so I would propose to continue.

If we are getting close to 4:30, you can cut me off and ask any questions you have of Mr. Luciani. Or would you prefer to ask right now?

[Board Panel confer]

MS. CHAPLIN: Mr. Millar, I have some questions for Mr. Luciani, so maybe I will ask those now. And that way we can ensure that we will be able to release him today.

And then we will take up your questions again, and then we will ensure, Mr. Smith, that you have an opportunity to ask him any questions you might have.

MR. SMITH: Thank you.

MS. CHAPLIN: Is that okay?

QUESTIONS BY THE BOARD:

MS. CHAPLIN: So Mr. Luciani, I am primarily interested in your understanding of the circumstances that accompanied the various examples in the U.S., where inclusion of CWIP in rate base was allowed.

And you set out some of the examples. Can you describe or -- describe for me the context in which those

findings have been made? Have they been made in the context of –- well, here we may call them leave-to-construct proceedings, but there, are they sort of Certificates of Public Convenience and Necessity? Can you give us a bit more about the overall context in which those approvals have been given?

MR. LUCIANI: They do vary from state to state, and of course, the Federal Energy Regulatory Commission is allowed 50 percent of CWIP in rate base on a long-standing basis.

So it is a little bit different. But to speak about the states, as a general matter, sometimes the legislation has set up some sort of procedure, some sort of annual review that may take place, and in that initial review, generally you will have a look at the reasonableness of the expenditures, as well as the idea of putting CWIP in rate base.

So usually in that first set, and it can be the Certificate of Necessity and Convenience.

There's the step in which the reasonableness of the project is reviewed, and simultaneously dealing with the CWIP issue.

MS. CHAPLIN: So maybe taking that piece by piece, so FERC, which as you have explained, on a long-standing basis has allowed 50 percent of CWIP in rate base, that is in the context of what type of approvals or applications?

MR. LUCIANI: Typically -- and again, the FERC has allowed 100 percent on certain types of investment recently, more recently, and I cite a number of examples.

Typically, you are talking there about transmission investment.

And transmission investment in the U.S., FERC has jurisdiction over the rates. The states have jurisdiction over the siting. So the FERC would not be doing a siting approval, the actual siting of a transmission line.

They are really dealing with the proposed rate, how to deal with the rate structuring and recovery of the asset.

MS. CHAPLIN: And in that context, when they have -- perhaps let's consider the most recent examples where they have allowed all of CWIP in rate base. Has it been done in the context of a finding that the entire project -- should it be completed in the way that it is included in the application is going to flow through to rates?

In other words, are they approving for rate recovery purposes the entirety of the project?

MR. LUCIANI: Yes, subject obviously to ongoing construction review, and so on, of the project.

MS. CHAPLIN: With, I guess, the caveat that should the costs be greater, that those incremental costs may be subject to subsequent review?

MR. LUCIANI: They would have to be justified, yes.

MS. CHAPLIN: But, otherwise, it is being approved? There is a coincident approval of the project for eventual treatment in rates and approval of the CWIP to go into rates?

MR. LUCIANI: Yes. The effective rate treatment is effectively approved by the FERC. Again, with

transmission, there is the siting kind of piece that would take place at the state regulatory body.

MS. CHAPLIN: Okay. So as you have described it, the ratemaking process and the consideration of the project, would it be a comparable type of review that is generally going on for state-level consideration for state projects, for the generation projects that you have presented as examples?

MR. LUCIANI: For the FERC, I would think more typically they would leave it to the states for the full justification of the project, and so on.

I think from the FERC's perspective, they would deal more that the ratemaking for this project is appropriate. And particularly when they move to incentive ratemaking and additional ROE adders and 100 percent of CWIP in rates, they're talking more about the risk of the project being above the average, and so on.

MS. CHAPLIN: Okay. And then for the examples where -- so we have covered the FERC side.

So the state examples, and you have your table at page 4 of your report, and then you describe some of the specific examples. Are the processes that have been involved there also been sort of coincident approvals of CWIP treatment and also for rate recovery for the project as a whole?

MR. LUCIANI: The project as a whole might not yet come to full fruition, because usually these projects are in the early stage.

So, for example, maybe it would be helpful to look at what is happening in Florida. There is a paragraph on page 5, the page after table 1, beginning -- it is a paragraph beginning:

> "In November 2008, the Florida PSC completed its first annual review of nuclear projects under the nuclear cost recovery process..."

That had been set up. They reviewed two projects, one having to deal with an uprate to existing capacity and others dealing with new nuclear units. They approved a recovery of site selection costs, preconstruction costs, carrying charges on the construction costs, i.e., CWIP in rate base, and a determination of the prudence was deferred until the next nuclear cost recovery cycle.

So I look at it as they were reviewing the notion that it was an economic investment, given the facts in existence at the time of the review, and also dealing with the rate treatment for the monies to be expended here in the near term.

MS. CHAPLIN: Okay. Perhaps you could help me with that, because I am trying to understand that in the context of what appears a couple of paragraphs up, the paragraph that begins at the bottom of page 4, where it says:

> "Under the regulations adopted in Florida, once a utility obtains an affirmative need determination for a nuclear power plant project..."

Then it continues on. So on the face of it, I was trying to reconcile this requirement that there be a

finding of need with what appears to be the staged approach that is described in the next paragraph.

What am I missing that ties those two together?

MR. LUCIANI: Yes. I think under the legislation in Florida, there was a proceeding in which they talked about the need for the facility, whether it was economic to do so, and then these subsequent proceedings, although, you know, it may well be that they were exactly simultaneous. I would have to look back to see. There was dealing with the cost recovery process for the expenditures spent thus far.

During that cost recovery process, I believe there was a review of the reasonableness of the expenditures predicted relative to the original assessment.

MS. CHAPLIN: Okay. Okay, thank you. Those are my questions. So, Mr. Millar, if you want to continue, and then we will ensure that there is a few minutes before 4:30.

MR. MILLAR: Yes. I am not sure if Mr. Smith had any re-examination for this witness. If so, would you like to do that now or wait until just before 4:30?

MR. SMITH: I think my preference would be to wait till 4:30 and see if I can roll it all in.

MR. MILLAR: Okay. Mr. Barrett, I have a few questions following up on a discussion you had both with Mr. Alexander and, to a lesser extent, Mr. Shepherd, I think. These relate to the Board report that we have been referencing.

Indeed, Mr. Alexander brought a bunch of copies of it, but I don't think he ever actually filed it, so I would propose to do that. And this is the report of the Board in EB-2009-0152, and it will be K13.8.

EXHIBIT NO. K13.8: REPORT OF THE BOARD IN EB-2009-0152.

MR. MILLAR: Does the panel have copies of that, both the witness panel and the Board Panel?

MR. BARRETT: We have copies of the report.

MR. MILLAR: Okay. So I am just looking to ask a few questions about in what context and how exactly the report applies to OPG.

I understand obviously it is the company's position that it does, and you reference a number of documents in support of that position.

If you could look at page 1 of Staff's booklets of documents, this is the statement from the Chair dated April 3rd. Do you have that?

MR. BARRETT: Yes.

MR. MILLAR: And, indeed, you quote from this letter in your application. The second paragraph appears in, I think it is, D2, tab 2, schedule 2, page 2.

MR. BARRETT: Yes, that's right.

MR. MILLAR: Now, the re line to this letter says "Regulatory framework for approval of investment in infrastructure by electricity transmitters and distributors." Do you see that?

MR. BARRETT: I do.

MR. MILLAR: Is OPG mentioned in this letter?

MR. BARRETT: We believe that parts of it apply to us, yes.

MR. MILLAR: My question is: Is OPG mentioned in this letter?

MR. BARRETT: The name "OPG" does not appear in the letter.

MR. MILLAR: Does "electricity generation" appear in the letter?

MR. BARRETT: No.

MR. MILLAR: And so Mr. Battista points out renewable distributed electricity generation is mentioned, but I suppose I should be more clear. Is nuclear generation mentioned or hydro?

MR. BARRETT: No.

MR. MILLAR: I would be remiss if I didn't ask this. You stated parts of this letter you believe apply to OPG. What parts are those?

MR. BARRETT: References to infrastructure investment and the references to utilities, generally.

MR. MILLAR: So the issues he is identifying, in your view, are issues that are common -- that are also issues for OPG; is that fair?

MR. BARRETT: Yes, that's correct.

MR. MILLAR: Okay. If you could flip to page 3 of Staff's booklet, this is a subsequent statement from the Chair which I think is referenced, though not quoted, in your evidence, and you were discussing it earlier, I think,

with Mr. Alexander.

You are familiar with this letter?

MR. BARRETT: I saw it when it came out.

MR. MILLAR: Okay. The first paragraph references the April 3rd letter. It says:

> "On April 3rd, I issued a statement confirming the Board's commitment to creating conditions that will foster timely and appropriate investment in electricity distribution and transmission infrastructure while ensuring that the interests of ratepayers continue to be protected."

Do you see that?

MR. BARRETT: I do.

MR. MILLAR: Is OPG mentioned in this letter?

MR. BARRETT: No, I don't see it.

MR. MILLAR: And as you have discussed with others, following these letters, the Board issued the report which I filed. But you are aware that prior to the issuance of the report, there was a Board Staff discussion paper. Are you aware of that?

MR. BARRETT: Yes, I am.

MR. MILLAR: And that stakeholders were invited to make comments on that paper?

MR. BARRETT: Yes, I think that is right.

MR. MILLAR: And OPG did make comments on the Staff paper?

MR. BARRETT: Yes.

MR. MILLAR: And if I understand what you stated, it was you asked that the Board specify or at least consider that the report should apply equally to OPG for nuclear generation projects at a high level. Is that more or less what you said to the Board?

MR. BARRETT: I wouldn't be surprised if that is what we said. I don't have the submission with me, and I haven't read it in some time.

MR. MILLAR: Okay. Is that inconsistent with your recollection?

MR. BARRETT: I honestly don't recollect the submission, but I wouldn't be surprised if we made a submission along those lines.

Certainly, that would be the company's position.

MR. MILLAR: Okay. Thank you.

The report itself -- I don't want to retread ground that Mr. Alexander had -- but if I could take you to page –- I guess it is page 2. I was looking for references to industries other than transmission and distribution.

And if you look in the introduction, the second sentence, it says:

> "On June 1st in a second statement, the Chair advised that the development of three initiatives, one of which is to consider more innovative approaches to cost recovery, primarily in relation to infrastructure investments relating to the accommodation of renewable generation and smart grid development, but

potentially also applicable in relation to other types of projects in appropriate circumstances..."

And can I take it that is at least one of the things that OPG is relying on to support its position that this report should apply to it?

MR. BARRETT: Yes. That's one of the references.

MR. MILLAR: Are there other -- to the extent you haven't already -- Mr. Alexander went over this with you, so I won't ask you to go through other things.

Can we agree, Mr. Barrett, that whether the report applies to OPG on its face, or if, as some may argue, it is more an analogous situation, as opposed to being strictly applicable, would it be OPG's view that, to the extent it seeks specific treatment under this report, it should be bound by the terms of that report?

MR. BARRETT: I think that would be for the Board to determine.

MR. MILLAR: Well, let me put it another way. In your view, your CWIP proposal is consistent with the report?

MR. BARRETT: That's right.

MR. MILLAR: And you wouldn't --

MR. BARRETT: For example --

MR. MILLAR: Sorry.

MR. BARRETT: I would say for example in the report we saw that the Board did not believe it was appropriate to start recovering depreciation until the asset went into service, and our proposal is consistent with that.

MR. MILLAR: You are not seeking treatment any different than what would be consistent with this report, at least in the company's view?

MR. BARRETT: As I understand the report.

MR. MILLAR: Okay. Could you turn to page 14, please? The first complete paragraph there, I will just read it. It states:

> "The Board's approach to alternative mechanisms should not be viewed, as one stakeholder commented, as a significant departure from many of the well-established and fundamental principles of utility regulation. Utilities will still be expected to demonstrate that the investment is needed, that it is prudent, and that it is economically feasible. Rate impacts will also be assessed."

You are not seeking a prudence review here, are you?

MR. BARRETT: There was an earlier discussion of prudence review, and we are certainly expecting that the Board would turn its mind to whether or not our planned project and the costs attendant to it are just and reasonable, and you can potentially say that is synonymous with prudence.

Again, the way I look at the words "prudence review" is taken from an Enbridge decision, where it defined prudence reviews as being a retrospective inquiry into whether or not a project had been prudently managed.

MR. MILLAR: Okay. So the prudence review, you see is

by and large the after-the-fact prudence review, when these assets close to rate base? Or are you talking about this particular CWIP proposal?

MR. BARRETT: I think there are two aspects to it.

As I think I tried to explain earlier, the Board has to be satisfied for the test period that our costs are just and reasonable, that what we're doing is prudent, in order to incorporate either CWIP or the other attendant costs impacts into payment amounts that it establishes.

We certainly expect that when assets close into rate base, that it would be to the Board to review whether or not there was a proper execution of the project, and conduct a prudence review if they thought that was necessary. That could also take place in the context of a disposition from the capacity refurbishment variance account, where we would have accumulated differences between our plans and the actual expenditures during the refurbishment period.

MR. MILLAR: Well, how can the Board assess the prudence of the CWIP amounts without assessing the prudence of the underlying project?

MR. BARRETT: I am not saying that they wouldn't assess the underlying prudence of the project. So I am obviously not being clear.

In terms of the test period, we have put forward a plan, in terms of work. We put forward budgets in terms of how we intend to spend money. We have explained our CWIP proposal. And we have put forward the impacts on

depreciation ARO and all of the other associated tax and Bruce lease impacts that flow from proceeding with the project. We are expecting the Board to turn their mind to those impacts and assess whether or not they're just and reasonable and should be part of our payment amounts.

Down the road, when we're completed work and we are looking back in time, there will likely be variances between our forecast budgets and our actuals. And it would not be unreasonable for the Board to inquire into those differences and satisfy itself whether they're a good reason for those variances.

And that, to me, that kind of retrospective backward-looking review is what I call a prudence review, and I think that is consistent with the way the Board defined it in an Enbridge case, which is RP-2001-0032, and the reference there is at page 60.

MR. MILLAR: Okay. Thank you. That is helpful. With regard to this after-the-fact prudence review, first, I understand that will probably take place when the assets become used and useful, which is sometime around 2020. I know there is a phased approach, but the closing to rate base will occur sometime around 2020; is that right?

MR. BARRETT: Yes. I think, as I said, I think it could happen also at the time we bring forward the balances and the capacity refurbishment variance account for disposition.

The Board, before disposing of those balances, would have to be satisfied that the things that gave rise to

those variances were prudent. So there will be at least the review of those, the variance account balances, reviewed by the Board of how we're doing on the project during that period.

MR. MILLAR: And those will come forward before the projects enter service?

MR. BARRETT: They will come forward as part of our regular two-year cycle, where we will be bringing forward the balances for disposition.

MR. MILLAR: Okay. But let's look forward.

First, was I right when I said that the projects will come in -- the refurbished reactors will come into service -- I think it is on a three- or four-year schedule -- around 2019, 2020? The specific date isn't important, but something like that?

MR. BARRETT: It is over the 2019 to 2024 period.

MR. MILLAR: Okay. At that time, when the particular units actually enter service, I understand you would seek to close to rate base the bulk of the amounts for those projects?

MR. BARRETT: Well, under CWIP, a lot of that capital would already be in rate base pursuant to the CWIP proposal, but we would certainly close the residual amount, and then seek approval to begin depreciating that asset in the normal course.

MR. MILLAR: When you come forward -- and I want to understand how this will work when it happens.

So the CWIP, there will be the CWIP amounts that are

already in rate base, if your proposal is accepted, and then presumably there will be some other costs at the tail end of the project that would close.

And when the Board does a prudence review of that, in your mind, would it be open to the Board at that point to decide: You know what? We're now going to do our prudence review. We look at all -- everything you had before you back in 2011, 2010, 2012. You should never have done this project, and we are not going to approve it and we are not going to allow these amounts into rate base?

Obviously, the company would never support such a view, but would it be open to the Board to make a decision at that time? Would that be within the Board's powers?

MR. SMITH: Well, the question of whether or not it is within the Board's powers or not, I think is properly a question for argument, but the witness can give his understanding of what the Board's jurisdiction is. That's fine.

MR. MILLAR: Okay. That's fine.

MR. BARRETT: As I said before, I think that would be -- that would be significantly inconsistent with what I think would have gone on before, because, as you can appreciate, we are here today asking for the recovery of certain dollars that flow from proceeding with the project.

And I don't know how the Board could put those dollars into the payment amounts without at least turning its mind to a question of whether or not what we're doing is reasonable.

MR. MILLAR: Okay. That's a very good point, so let me put it another way.

Should the Board in this proceeding be telling you if they think the Darlington refurbishment is a good idea? Are you asking the Board to do that?

MR. BARRETT: That would be helpful. We certainly haven't asked for approval, but I think there is a linkage between the costs that we have proposed or we have sought for approval, and the underlying business dynamics, the underlying business project.

MR. MILLAR: Well, I would like to be very clear on this, because I think it is an important point.

You are not seeking approval from this Board to do the Darlington refurbishment project; correct?

MR. BARRETT: Correct.

MR. MILLAR: However, your view in 2020, it will not be open to the Board at that time to say, You should never have done the Darlington refurbishment?

MR. BARRETT: If in the subsequent years the Board has approved payment amounts that include the cost consequences for all of the stuff that we have done, including CWIP in rate base, it would be a significant reversal, in my mind, and greatly unfair to the company at that point.

MR. MILLAR: And I don't disagree with that. You would be in a terrible bind in the Board were to find in 2020 these are imprudent amounts. So I guess the follow-up question is: In your mind, an approval of CWIP is an approval of the prudency of the Darlington refurbishment?

MR. BARRETT: Certainly in respect of the capital that we are proposing to spend in the test period, I don't see how you could not have that linkage.

MR. MILLAR: Right. But, as you have said, once you put that capital in, it would be very difficult for the Board, when the -- when the projects are used and useful to claw that amount back?

MR. BARRETT: That wasn't the point I was making.

What I was trying to explain is we are here for 2011-2012, and there are certain capital expenditures that we forecast in respect of the project, and the CWIP is the carry on that capital.

The Board could approve that CWIP for 2011-2012, and when we came forward for 2013 and 2014 they could take a different view. They could say, We have reconsidered the CWIP notion and we are not going to allow it any further.

That would be open to them, in my mind.

MR. SMITH: I don't know whether this will help or not, and if people don't want this from me, that's fine, but my -- I expect that OPG's position in argument, so that everyone is perfectly clear on the point, is, for the test period, the company fully expects the Board will review, whether you call it reasonable or prudent, expenditures relating to the capital and the resulting CWIP for the test period. And obviously there will be stages as this project develops.

So, yes, I expect it would be the company's position at the end of the day, as a matter of law, that the Board

could not reverse itself, having taken those steps throughout the period.

MR. MILLAR: Okay. I realize we're almost at 4:30. I am not going to finish all of my questions for this panel, but my final question today is: It will be OPG's view that if CWIP is approved, the Darlington refurbishment is approved by the Board?

MR. BARRETT: No, I don't think we would go that far.

MR. MILLAR: Okay. We are almost at 4:30. I think we will have to cut it off, and maybe we will continue this discussion on Monday morning.

MR. SMITH: I don't have any re-examination, so I am happy for you to continue until 4:30 with Mr. Luciani.

MS. CHAPLIN: I think we will break now, because I believe the panel, we will also have some questions, and I don't think we will be able to finish close enough to 4:30. So I am sure Mr. Barrett doesn't object to returning.

Mr. Luciani --

MR. SMITH: He's on the next panel.

MS. CHAPLIN: I know. Mr. Luciani is excused with the Board's thanks.

MR. LUCIANI: Thank you.

MS. CHAPLIN: We will rise now until 9 o'clock on Monday morning.

MR. SMITH: Thank you.

MR. BARRETT: Thank you.

MS. CHAPLIN: Thanks.

--- Whereupon the hearing adjourned at 4:27 p.m.

Her Majesty the Queen v. Delchev
[Indexed as: R. v. Delchev]

Ontario Reports

Court of Appeal for Ontario,

Simmons, Rouleau and Tulloch JJ.A.

May 28, 2015

126 O.R. (3d) 267 | 2015 ONCA 381

Case Summary

Criminal law — Abuse of process — Prosecutorial discretion — Trial Crown arranging resolution conference with police, accused, his father and his counsel — Accused alleging that trial Crown offered to recommend conditional sentence to Crown attorney on 16 drug and firearms charges if accused pleaded guilty and provided statement indicating that he had given false evidence in pre-trial proceedings and that his counsel knew it was false — Trial Crown knowing that accused's father paying defence counsel and advising father that acceptance of offer would reduce legal fees and that son should seek independent legal advice — Accused rejecting offer and applying for stay of proceedings on ground that Crown's conduct amounted to abuse of process — Trial judge erring in ruling that no exception to settlement privilege applied and that accused failing to meet threshold evidentiary burden on abuse [page268] of process application because no extrinsic evidence adduced — Accused meeting threshold evidentiary burden as offer and circumstances in which it was made were sufficient to raise concerns about Crown's exercise of discretion — Offer potentially having negative effect on accused's relationship with his counsel and direct communication with accused's father could be viewed as indirectly breaching ethical rule preventing direct communicating with person represented by counsel — Trial judge erring in failing to embark on inquiry into reasons behind exercise of Crown's discretion — New trial ordered.

Criminal law — Evidence — Privilege — Settlement privilege — Trial Crown arranging resolution conference with police, accused, his father and his counsel — Accused alleging that trial Crown offered to recommend conditional sentence to Crown attorney if accused pleaded guilty and provided statement indicating that he gave false evidence in pre-trial proceedings and that his counsel knew it was false — Trial Crown knowing accused's father paying defence counsel and advising father that offer would reduce legal fees and that son should seek independent legal advice — Accused rejecting offer and applying for stay of proceedings on ground that Crown's conduct amounted to abuse of process — Resolution discussion subject to settlement privilege but judge erring in finding no exception applied — Accused's allegation of prosecutorial misconduct constituting competing public interest that outweighed public interest in encouraging

settlement — Trial judge erring in finding that accused was required to provide extrinsic evidence of misconduct to establish exception to settlement privilege — Offer itself alleged to be abuse and unlikely to be extrinsic evidence available to support motion — Unusual nature of offer made by trial Crown and circumstances in which it was made analogous to rare and exceptional event such as Crown repudiating plea agreement and meeting accused's evidentiary burden on abuse of process application — Offer having potential to seriously undermine relationship with counsel on eve of trial and communication with accused's father could be seen as violating rule prohibiting direct contact with person represented by counsel — Accused having met threshold evidentiary burden on application and trial judge should have required Crown to explain the exercise of discretion — New trial required.

The accused was charged with 16 firearms and drug-related offences. The trial Crown, the accused, his father and the accused's counsel attended a resolution discussion. The accused alleged that the trial Crown made a direct offer to him to recommend a conditional sentence to the Crown attorney if the accused pleaded guilty and provided an induced statement in which he admitted that he had given false evidence in pre-trial proceedings and that his counsel knew it was false. The trial Crown knew that the accused's father was paying his legal costs. He told the father that the length and cost of the proceedings would be decreased by accepting the offer and suggested that his son obtain independent legal advice about it. The accused rejected the offer and brought an application for a stay of proceedings on the ground that the Crown's conduct amounted to an abuse of process. The Crown asserted settlement privilege with respect to the content of the resolution discussion but was prepared to respond to the application on the basis that the offer was made and that the Crown had advised the accused to get independent legal advice. The trial judge found that the resolution discussion was subject to settlement privilege, that the accused was required to provide extrinsic evidence of prosecutorial misconduct in order to establish an exception [page269] to settlement privilege, and that he had not done so. She dismissed the application. The accused was convicted. He appealed.

Held, the appeal should be allowed.

The trial judge did not err in finding that the resolution discussion was subject to settlement privilege. However, an exception to settlement privilege existed in the circumstances of this case. The accused's allegation of prosecutorial misconduct constituted a competing public interest that outweighed the public interest in encouraging settlement. The harm to the settlement privilege is minimized where, as in the present case, the party seeking to adduce the contents of a settlement discussion does not rely upon them as proof of an admission by the other side regarding the merits of the proceedings. The allegations here went to important issues affecting the administration of justice and the public interest in allowing an exception to the settlement privilege based to promote those interests outweighed the goal of encouraging settlement.

The trial judge erred in concluding that the accused was required to provide extrinsic evidence of prosecutorial misconduct in order to establish an exception to settlement privilege. Where the abuse is alleged to be the offer itself, there is likely to be little available extrinsic evidence. The evidence of the settlement meeting should have been admitted.

The accused did have to overcome an evidentiary burden before the court would look behind the exercise of prosecutorial discretion, but that evidentiary threshold was met based on the allegations the Crown was prepared to respond to. The offer itself and the circumstances in which it was made were sufficient to raise the court's concern about the Crown's exercise of discretion. Although defence counsel were present at the meeting, given the content of the offer, it could be seen as being made directly to the accused and his father, who was paying the legal bills. The *Rules of Professional Conduct* prevent counsel from directly contacting a party who is represented by counsel (without the consent of that counsel). The offer had the potential to negatively affect the relationship between the accused and his counsel, particularly as it was still subject to approval by the Crown attorney. If the accused accepted the offer, and it was then rejected by the Crown attorney, it is unlikely that the accused could have re-established his relationship with his counsel, given the content of the offer. The relationship between an accused and defence counsel is essential to the proper and fair administration of the criminal justice system, and the Crown should not lightly take steps that will interfere with that relationship. The accused has met his threshold burden to produce sufficient evidence to require the Crown to explain the exercise of discretion involved in making the offer. The issues of whether the accused had made out an abuse of process on a balance of probabilities and whether this was one of the rare and exceptional cases in which a stay was warranted should be decided on a full record. A new trial was ordered.

R. v. Nixon, [2011] 2 S.C.R. 566, [2011] S.C.J. No. 34, 2011 SCC 34, 237 C.R.R. (2d) 333, 417 N.R. 274, [2011] 7 W.W.R. 429, 2011EXP-2036, 41 Alta. L.R. (5th) 221, J.E. 2011-1113, 502 A.R. 18, 271 C.C.C. (3d) 36, 335 D.L.R. (4th) 565, 85 C.R. (6th) 1, 13 M.V.R. (6th) 1, EYB 2011-192222, 95 W.C.B. (2d) 754; *R. v. Power*, [1994] 1 S.C.R. 601, [1994] S.C.J. No. 29, 165 N.R. 241, J.E. 94-649, 117 Nfld. & P.E.I.R. 269, 89 C.C.C. (3d) 1, 29 C.R. (4th) 1, 2 M.V.R. (3d) 161, 23 W.C.B. (2d) 194; *Sable Offshore Energy Inc. v. Ameron International Corp*., [2013] 2 S.C.R. 623, [2013] S.C.J. No. 37, 2013 SCC 37, 332 N.S.R. (2d) 1, 2013EXP-2138, J.E. 2013-1134, EYB 2013-223434, 37 C.P.C. (7th) 225, 446 N.R. 35, 359 D.L.R. (4th) 381, 22 C.L.R. (4th) 1, 228 A.C.W.S. (3d) 78, **consd** [page270]

Other cases referred to

Pirie v. Wyld (1886), 11 O.R. 422, [1886] O.J. No. 188 (H.C.J.); *R. v. Anderson*, [2014] 2 S.C.R. 167, [2014] S.C.J. No. 41, 2014 SCC 41, 2014EXP-1824, J.E. 2014-1034, EYB 2014-238146, 350 Nfld. & P.E.I.R. 289, 60 M.V.R. (6th) 1, 310 C.R.R. (2d) 197, 311 C.C.C. (3d) 1, 11 C.R. (7th) 1, 373 D.L.R. (4th) 577, [2014] 3 C.N.L.R. 267, 458 N.R. 1, 114 W.C.B. (2d) 278; *R. v. Boucher*, [1955] S.C.R. 16, [1954] S.C.J. No. 54, 110 C.C.C. 263, 20 C.R. 1; *R. v. O'Connor*, [1995] 4 S.C.R. 411, [1995] S.C.J. No. 98, 130 D.L.R. (4th) 235, 191 N.R. 1, [1996] 2 W.W.R. 153, J.E. 96-64, 68 B.C.A.C. 1, 103 C.C.C. (3d) 1, 44 C.R. (4th) 1, 33 C.R.R. (2d) 1, 29 W.C.B. (2d) 152; *Sable Offshore Energy Project v. Ameron International Corp*., [2015] N.S.J. No. 23, 2015 NSCA 8, 38 C.L.R. (4th) 1, 354 N.S.R. (2d) 333, [2015] I.L.R. I-5689, 249 A.C.W.S. (3d) 538; *Thomson v. University of Alberta*, [2013] A.J. No. 1248, 2013 ABCA 391, 45 C.P.C. (7th) 304, 561 A.R. 391, 234 A.C.W.S. (3d) 78; *Union Carbide Canada Inc. v. Bombardier Inc*., [2014]

1 S.C.R. 800, [2014] S.C.J. No. 35, 2014 SCC 35, 457 N.R. 279, 55 C.P.C. (7th) 1, 373 D.L.R. (4th) 626, 2014EXP-1508, J.E. 2014-849, EYB 2014-236800, 239 A.C.W.S. (3d) 941

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Canadian Charter of Rights and Freedoms, ss. 7, 8, 10(*b*)

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Martin, G. Arthur, and the Attorney General's Advisory Committee on Charge Screening, Disclosure and Resolution Discussions, *Report of the Attorney General's Advisory Committee on Charge Screening, Disclosure, and Resolution Discussions* (Toronto: Queen's Printer for Ontario, 1993)

Ministry of the Attorney General of Ontario, *Crown Policy Manual* (Toronto: Queen's Printer for Ontario, 2005)

APPEAL by the accused from the convictions entered by Low J. of the Superior Court of Justice, sitting with a jury, on August 24, 2012.

Jill R. Presser and *Andrew Menchynski*, for appellant.

Susan Magotiaux, for respondent.

The judgment of the court was delivered by

[1] **TULLOCH J.A.**: — The appellant, Nikolai Delchev, appeals against his convictions on 16 counts of firearms and drug-related offences, including one count of possession of cocaine for the purpose of trafficking, following a trial by judge and jury. [page271]

[2] The appellant advances one primary ground of appeal, which is that the trial judge erred in failing to order a stay of proceedings for an abuse of process. The appellant's abuse of process application was made following a resolution discussion with the trial Crown in which the appellant alleges the trial Crown offered to recommend a conditional sentence sentencing

position to the Crown-in-charge based on a guilty plea to certain charges if the appellant provided an induced statement indicating certain evidence he had given in pre-trial proceedings was false and his trial counsel knew it was false. The Crown asserted the discussion was privileged but agreed to respond to the application on the basis of a summary of the appellant's allegations concerning what had taken place.

[3] The trial judge found that the discussion was privileged and that, in any event, there was no evidence that the conditional offer was made without foundation or in bad faith. She dismissed the appellant's application.

[4] On appeal, the appellant seeks a stay of proceedings based on abuse of process or, in the alternative, an order for a new trial at which his abuse of process claim can be fully litigated.

A. *Facts*

[5] The appellant was charged with 23 drug and weapons-related offences following a police search of two residences. The police obtained the search warrants for the residences as a result of information received from a confidential informant.

[6] Trial was set for February 28, 2011. Part of the defence theory was that a man named Jason Ramsay had forced the appellant to store the guns by threatening him with physical harm. According to the defence, the appellant owed Ramsay a significant drug debt and Ramsay threatened the appellant with harm to himself and his father if he did not pay off his debt. The defence alleged that Ramsay issued the appellant an ultimatum: store the weapons, or Ramsay would tell "his guys" the appellant owed a significant debt.

[7] The defence also alleged that Ramsay was the confidential informant who tipped off the police to the guns, and that the Crown knew the appellant only possessed the guns because Ramsay had threatened him. Based on this allegation and alleged breaches of the appellant's ss. 7, 8 and 10(*b*) *Canadian Charter of Rights and Freedoms* rights, at the outset of trial the defence brought an application to exclude the evidence from the searches of the residences and to stay the proceedings (the "first application"). [page272]

[8] The appellant testified on the first application to the alleged threats by Ramsay. Ramsay testified and contradicted the appellant's evidence. Although the trial judge found the appellant's s. 10(*b*) *Charter* rights were breached, she declined to exclude the evidence obtained on executing the search warrants. The appellant's first application was dismissed.

[9] A new trial date was set for December 12, 2011. That morning, at the request of counsel, the trial judge stood the matter down to allow for a resolution discussion. Counsel returned, and told the trial judge the discussion was unsuccessful. They then selected a jury. Evidence was to be called the following day.

[10] The next morning, the appellant advised he would be bringing another abuse of process application (the "second application"). The jury was discharged.

[11] The second application was founded on the content of the offer made by the trial Crown the previous day. The Crown asserted privilege with respect to the content of the resolution discussion, but agreed to respond to the application on the basis of the following allegations:

(a) there was a settlement discussion on December 12, 2011, with [the trial Crown attorney, the officer in charge, the appellant's two trial counsel, the appellant and the appellant's father];

(b) the Crown indicated that if the [appellant] was to provide an induced statement in which he would admit that his evidence up to that point in the proceeding regarding duress was false, and that his counsel knew it to be false, the Crown would recommend a conditional sentence to the Crown Attorney for Scarborough as the Crown position on sentence upon the [appellant's] plea of guilty to certain charges;

(c) the Crown advised that the [appellant] should get independent legal advice regarding the settlement offer;

(d) the Crown advised that this settlement would be conditional on the approval of the Crown Attorney for Scarborough;

(e) the Crown advised the [appellant's] father that the resolution would save a lot of time and money and that the [appellant] should get independent legal advice regarding the offer;

(f) the offer was immediately rejected by the appellant; [and]

(g) due to the allegations made by the [appellant], [the trial Crown who made the offer would] not be conducting the trial of this matter [if it was heard on its merits].

[12] The appellant obtained separate counsel to argue the second application.

Decision on the second application

[13] The trial judge concluded that the resolution discussion between the appellant, his counsel and the Crown was subject to [page273] settlement privilege. She determined the Crown did not waive privilege simply because the discussion was conducted in the presence of the appellant's father.

[14] The trial judge held that no exception to settlement privilege applied in this case. She stated that the notable exceptions to settlement privilege include when evidence of settlement discussions is necessary to prove either that a settlement was reached or that the communications contained threats or illegal actions. No bargain was reached, and the appellant failed to provide extrinsic evidence of prosecutorial impropriety.

[15] The trial judge relied on case law dealing with the review of the exercise of prosecutorial discretion -- the Supreme Court's decisions in *R. v. Nixon*, [2011] 2 S.C.R. 566, [2011] S.C.J. No. 34, 2011 SCC 34 and *R. v. Power*, [1994] 1 S.C.R. 601, [1994] S.C.J. No. 29 -- to conclude that extrinsic evidence of impropriety beyond the communications themselves was required for the court to inquire into the reasons behind the exercise of Crown discretion. She appears to have reasoned that it was necessary for the appellant to meet this evidentiary threshold to enable her to inquire into whether there was prosecutorial impropriety such that an exception to settlement privilege would apply.

[16] She held there was no evidence that Crown counsel was threatening the appellant or suggesting he should do something unlawful. She reasoned that the offer was similar to other

offers of sentencing consideration in exchange for information about other persons. She rejected the proposition that solicitors should be immune from being targets of this type of plea bargain.

[17] The trial judge rejected the appellant's argument that the offer amounted to an attempt to interfere in his relationship with his solicitor. She reasoned that if the offer had been accepted, there would have been a conflict -- but in that case, the appellant would not have had a trial on the merits. As the offer was rejected, there was no breach of the appellant's relationship with his counsel, who were to continue as counsel at any trial.

[18] The trial judge concluded that because settlement privilege applied, and there was no extrinsic evidence supporting an exception based on prosecutorial impropriety, the evidence of the discussion was inadmissible. She dismissed the application for a stay.

The appellant's trial

[19] The appellant proceeded to trial before a new jury. He testified again in support of his defence of duress, though the [page274] trial judge later declined to put duress to the jury. His original counsel represented him at trial. The jury found the appellant guilty on 16 counts.

B. *Grounds of Appeal*

[20] The appellant requests that this court enter a stay of proceedings or, in the alternative, order a new trial to enable him to have a full hearing of his abuse of process application. The appellant makes three main arguments for why the appeal should be allowed. They are as follows:

(1) the trial judge erred in finding that the evidence of the settlement discussion was subject to settlement privilege and therefore inadmissible on the application;

(2) the trial judge denied natural justice to the appellant by considering the propriety of the Crown's conduct without giving the appellant an opportunity to make oral submissions on the issue;

(3) the trial judge erred in failing to find that the trial Crown's conduct was grossly improper such as to constitute an abuse of process warranting a stay of proceedings.

[21] I agree with the appellant that the trial judge erred in finding the evidence of the resolution discussion could not be admitted as an exception to settlement privilege. On the abuse of process issue, I conclude the appellant met the evidentiary burden for an inquiry into the exercise of Crown discretion set out by the Supreme Court in *Nixon*. I would therefore allow the appeal and order a new trial. As a result, it is not necessary to address the appellant's argument that he was denied natural justice.

(1) *Settlement privilege*

[22] The appellant asks this court to find that the evidence of the plea bargaining discussion was admissible for the purpose of alleging abuse of process by the Crown. In my view, while the evidence of the discussion is subject to settlement privilege, I agree with the appellant that the trial judge erred in holding no exception to that privilege applied. The evidence of the discussion

should have been admitted for the purpose of the appellant's abuse of process application.

(a) *Standard of review*

[23] The question of whether evidence is privileged involves the identification of legal principles, and the application of those [page275] principles to the facts as drawn from the evidence. The trial judge's identification of the applicable legal principles will be assessed on a correctness standard, though deference is owed to her application of those principles to the facts: *Sable Offshore Energy Project v. Ameron International Corp.*, [2015] N.S.J. No. 23, 2015 NSCA 8, 38 C.L.R. (4th) 1, at para. 43; see, also, *Thomson v. University of Alberta*, [2013] A.J. No. 1248, 2013 ABCA 391, 561 A.R. 391, at para. 11.

(b) *Is the discussion protected, prima facie, by settlement privilege?*

[24] Settlement privilege is a class privilege, creating a "*prima facie* presumption of inadmissibility": *Sable Offshore Energy Inc. v. Ameron International Corp.*, [2013] 2 S.C.R. 623, [2013] S.C.J. No. 37, 2013 SCC 37, at para. 12. Settlement privilege applies only if the following conditions are met (A.W. Bryant, S.N. Lederman and M.K. Fuerst, *Sopinka, Lederman & Bryant: The Law of Evidence in Canada*, 4th ed. (Markham, Ont.: LexisNexis Canada, 2014), at p. 1039:

(1) A litigious dispute must be in existence or within contemplation.

(2) The communication must be made with the express or implied intention that it would not be disclosed to the court in the event negotiations failed.

(3) The purpose of the communication must be to attempt to effect a settlement.

(Citations omitted)

[25] The appellant takes issue with the third of these requirements. He argues the offer was not made for the purpose of achieving settlement or compromise, but rather [at para. 24] "with some other object in view and from wrong motives": *Pirie v. Wyld* (1886), 11 O.R. 422, [1886] O.J. No. 188 (H.C.J.).

[26] While the Crown's offer was unusual, I am not prepared to infer that resolving the appellant's charges was not at least some part of the purpose of the offer. Settlement does not have to be the only purpose of a settlement negotiation in order for privilege to apply. It is not uncommon for a resolution offer to include an agreement that an accused will testify for the Crown in another matter. The resolution discussion here was arranged so that the Crown could make an offer of settlement, albeit a highly unusual one. All the parties involved understood that a settlement discussion was occurring.

[27] Settlement privilege applies to the discussion and the evidence from the discussion is *prima facie* inadmissible on the abuse of process motion. However, based on the circumstances of [page276] the discussion and the content of the offer, I would conclude the evidence is admissible as an exception to settlement privilege. I will explain.

(c) *Does an exception to settlement privilege apply?*

[28] Exceptions to settlement privilege will be found when the justice of the case requires it: *Sable Offshore*, at para. 12. As the Supreme Court held in *Sable Offshore*, at para. 19, to justify an exception,

> . . . a defendant must show that, on balance, "*a competing public interest outweighs the public interest in encouraging settlement*". These countervailing interests have been found to include allegations of misrepresentation, fraud or undue influence, and preventing a plaintiff from being overcompensated.

(Citations omitted; emphasis added)

[29] Below, I first consider whether "the public interest in encouraging settlement" would be furthered by preventing admission of the discussion in this case. I then determine whether the appellant's allegation of prosecutorial misconduct constitutes a "competing public interest" that outweighs the public interest in encouraging settlement as applied to the facts of this case.

[30] The public interest in and rationale behind settlement privilege was summarized by the Supreme Court in *Union Carbide Canada Inc. v. Bombardier Inc*., [2014] 1 S.C.R. 800, [2014] S.C.J. No. 35, 2014 SCC 35, at para. 31:

> Settlement privilege is a common law rule of evidence that protects communications exchanged by parties as they try to settle a dispute. Sometimes called the "without prejudice" rule, it enables parties to participate in settlement negotiations without fear that information they disclose will be used against them in litigation. This promotes honest and frank discussions between the parties, which can make it easier to reach a settlement: "In the absence of such protection, few parties would initiate settlement negotiations for fear that any concession they would be prepared to offer could be used to their detriment if no settlement agreement was forthcoming" (A. W. Bryant, S. N. Lederman and M. K. Fuerst, *The Law of Evidence in Canada* (3rd ed. 2009), at para. 14.315).

[31] In other words, settlement privilege is important because parties would be reluctant to engage in settlement discussions if those discussions could be admitted at trial as evidence of concessions. The exceptions to this general privilege are justified where evidence of the settlement or negotiations is intended for use other than illustrating the weaknesses of one party's case: see *Sopinka, Lederman & Bryant: The Law of Evidence in Canada*, at pp. 1044-1045; R.W. Hubbard, S. Magotiaux and S.M. Duncan, *The Law of Privilege in Canada*, vol. 2, looseleaf (Aurora, Ont.: Canada Law Book, 2014), at pp. 12-96.1 to 12-96.2 (September 2014). [page277] If a party is not seeking to admit the settlement offer or negotiations as evidence of a concession, an exception to settlement privilege would do little to detract from the "public interest in encouraging settlement".

[32] In the instant case, the appellant was not attempting to adduce the Crown's settlement offer as evidence that the Crown had a weak case. While the respondent notes that the appellant did attempt to use the offer for such a purpose on his sentence appeal, the issue here is whether the contents of the settlement discussion are admissible to allege abuse of process. The allegation of abuse of process is unrelated to the merits of the Crown's case against the appellant. Admission of the settlement offer on the abuse of process motion would have a minimal effect, at most, on the goal of encouraging settlement.

[33] I turn now to whether there is a "competing public interest" that militates in favour of an exception to settlement privilege. As stated above, these competing "interests have been found to include allegations of misrepresentation, fraud or undue influence, and preventing a plaintiff from being overcompensated": *Sable Offshore*, at para. 19 [citations omitted]. In my view, an allegation of prosecutorial misconduct constitutes an analogous countervailing interest.

[34] An allegation of prosecutorial misconduct is analogous to the examples provided by the Supreme Court in *Sable Offshore* of misrepresentation, fraud and undue influence. These examples all suggest that one party has engaged in wrongdoing that may have led to an unjust settlement or that may have tainted the conduct of the litigation itself. It is in the interests of justice for a person who has been wronged to be able to present evidence of the alleged wrongdoing before the court.

[35] This policy objective is amplified when the alleged wrongdoing is an abuse of process by the Crown. While the stakes may be high in many civil proceedings, in the criminal context, the risk that an accused person may be deprived of his or her liberty in circumstances amounting to an abuse of process is very serious indeed. As stated by L'Heureux-Dubé J., writing for the majority of the court in *R. v. O'Connor*, [1995] 4 S.C.R. 411, [1995] S.C.J. No. 98, at para. 63:

> It would violate the principles of fundamental justice to be deprived of one's liberty under circumstances which amount to an abuse of process and, in my view, the individual who is the subject of such treatment is entitled to present arguments under the *Charter* and to request a just and appropriate remedy from a court of competent jurisdiction.

[36] I would note that there is a distinction between whether the Crown must justify its exercise of discretion and whether an [page278] exception to settlement privilege applies such that the accused can put the statements made to him by the Crown before the court. An accused is permitted to give evidence of a settlement offer made by the Crown in order to argue that the settlement offer constituted an abuse of process; by contrast, the Crown will only exceptionally be required to justify that exercise of discretion.

[37] In my view, the appellant has raised a countervailing public interest -- alleged prosecutorial misconduct amounting to an abuse of process -- that outweighs the public interest in promoting settlement in the circumstances of this case.

(d) *Was extrinsic evidence of prosecutorial misconduct required to establish an exception to settlement privilege?*

[38] The trial judge erred by concluding the appellant was required to provide "extrinsic evidence" of prosecutorial misconduct in order to establish an exception to settlement privilege.

[39] The Supreme Court did not give any indication in *Sable Offshore* that extrinsic evidence was required; the court indicated instead that "allegations" of misrepresentation, fraud or undue influence, for example, could suffice (at para. 19). In the case of fraud or undue influence, a party's wrongful conduct may have occurred entirely within the context of negotiations. An allegation that a party lied during negotiations may be difficult to substantiate absent evidence of the negotiations themselves. Similarly, such a requirement would make it impossible for an accused to argue the content of an offer itself was abusive. Where the content of an offer itself is

alleged to be the abuse, there will necessarily be no or limited extrinsic evidence to support the allegation.

[40] In my view, the trial judge in the present case erred in relying on *Nixon* and *Power* for the proposition that extrinsic evidence is a requirement to establish an exception to settlement privilege. As the appellant correctly points out, those cases do not deal with settlement privilege, but rather the review of prosecutorial discretion.

[41] The trial judge erred in failing to admit the evidence of the resolution discussion. I now turn to the appellant's argument on abuse of process.

(2) *Abuse of process*

[42] The appellant's main argument is that the settlement offer made to him by Crown counsel constitutes an abuse of process which entitles him to a stay of proceedings. [page279]

[43] While the trial judge dismissed the application on the basis of settlement privilege, due to the manner in which she addressed the applicability of an exception, she also commented on the merits of the application for a stay. She found that "[t]here must be an evidentiary basis of prosecutorial impropriety, consisting of evidence extrinsic to the settlement communications themselves" before the court will inquire into the reasons behind the settlement offer. She concluded the appellant had failed to provide the required extrinsic evidence.

[44] In my view, the trial judge correctly stated that the appellant must overcome an evidentiary burden before the court will look behind the exercise of prosecutorial discretion. However, she erred in concluding that extrinsic evidence is required in order to meet that burden. For the reasons outlined below, I agree with the appellant that the evidentiary threshold for an inquiry into prosecutorial discretion was met on the allegations the Crown was prepared to respond to. The denial of the inquiry is an error and a new trial is necessary.

[45] In explaining how I reach this conclusion, I first outline the approach to the review of prosecutorial discretion, including the threshold evidentiary burden that must be met by an accused person alleging an abuse of process based on the improper exercise of prosecutorial discretion. Second, I explain why the Crown's offer and the circumstances in which it was made constitute a rare and exceptional event, analogous to the Crown's decision to repudiate a plea agreement in *Nixon.* Finally, I go on to explain why the appropriate remedy in the circumstances is to send the matter back for a new trial where the issues of whether the appellant has proved an abuse of process and whether a stay is warranted can be pursued.

(a) *How do courts approach the review of prosecutorial discretion?*

[46] Prosecutorial discretion is "an expansive term that covers all 'decisions regarding the nature and extent of the prosecution and the Attorney General's participation in it'": *R. v. Anderson*, [2014] 2 S.C.R. 167, [2014] S.C.J. No. 41, 2014 SCC 41, at para. 44 (citations and internal quotations omitted). The decision to negotiate a plea agreement falls within the scope of prosecutorial discretion: *Anderson*, at para. 44. Neither party in the present case disputes that the settlement offer made to the appellant constituted an exercise of prosecutorial discretion.

[47] In most cases, the exercise of prosecutorial discretion is not subject to review by the courts. The rationales for this principle include the doctrine of separation of powers, the efficiency [page280] of the criminal justice system and the limited competence of courts to consider the factors involved in making decisions to prosecute: *Anderson*, at paras. 46-47.

[48] Prosecutorial discretion is reviewable, however, for abuse of process, which must be established by the accused on a balance of probabilities: *Anderson*, at paras. 51-52.

[49] An accused must meet a threshold evidentiary burden before the court will embark on an inquiry into the reasons behind the exercise of discretion: *Anderson*, at para. 55. Although the ultimate burden of establishing abuse of process lies on the accused, once an accused has established this evidentiary foundation, "the Crown may be required to provide reasons justifying its decision": *Anderson*, at para. 52. This evidentiary foundation is the main subject of dispute in this case.

[50] The requirement for an accused to meet a threshold burden was explained by the Supreme Court in *Nixon*. *Nixon* dealt with the Crown's repudiation of a plea agreement. Justice Charron, writing for the court, commented, at paras. 62-63:

> [T]here is good reason to impose a threshold burden on the applicant who alleges that an act of prosecutorial discretion constitutes an abuse of process. Given that such decisions are generally beyond the reach of the court, it is not sufficient to launch an inquiry for an applicant to make a bare allegation of abuse of process. For example, it would not suffice for an applicant to allege abuse of process based on the fact that the Crown decided to pursue the charges against him but withdrew similar charges against a co-accused. Without more, there would be no basis for the court to look behind the exercise of prosecutorial discretion. However, the repudiation of a plea agreement is not just a bare allegation. It is evidence that the Crown has gone back on its word. As everyone agrees, it is of crucial importance to the proper and fair administration of criminal justice that plea agreements be honoured. The repudiation of a plea agreement is a rare and exceptional event. In my view, evidence that a plea agreement was entered into with the Crown, and subsequently reneged by the Crown, provides the requisite evidentiary threshold to embark on a review of the decision for abuse of process.

[51] While it is clear from *Nixon* that a "bare allegation" on its own will not meet the requisite threshold, it does not follow that an accused must produce extrinsic evidence (*i.e.*, evidence extrinsic from the settlement offer itself) in order to meet the burden. A requirement for extrinsic evidence would be irreconcilable with the Supreme Court's conclusion in *Nixon* that repudiation of a plea agreement in and of itself is not a bare allegation and meets the evidentiary burden. The impugned act of prosecutorial discretion may be sufficient on its own to meet the threshold burden.

[52] Two avenues to meeting the threshold emerge from the Supreme Court's decisions in *Nixon* and *Anderson*. First, the threshold evidentiary burden will be met if the accused adduces [page281] evidence that the prosecutor exercised its discretion in bad faith or for improper motives: see *Anderson*, at para. 55.

[53] Second, as in *Nixon*, the threshold may also be met where a discretionary decision is so rare and exceptional in nature that it demands an explanation. *Nixon* provides the best example

of this second type of case. In the passage quoted above, Charron J., writing for the court, concluded that the fact that a plea agreement had been repudiated alone was sufficient to meet the threshold evidentiary burden. Although no evidence of bad faith was provided, the Supreme Court of Canada found that the act of repudiating a plea agreement was "evidence that the Crown has gone back on its word". Because of the importance to the fair and proper administration of criminal justice of ensuring that plea bargains are honoured, repudiation of a plea bargain was a "rare and exceptional event" that demanded an explanation from the Crown. Ultimately, the explanation provided by the Crown satisfied the court that there was no abuse of process.

[54] Justice Charron did not set out criteria for determining what else might qualify as a "rare and exceptional event". In my view, the sole criteria cannot be that the decision or type of decision is infrequently made, as unusual decisions may result simply from the nature of a particular prosecution. I would infer from *Nixon* that a Crown discretionary decision may qualify as a rare and exceptional event when the decision itself raises the court's concern about the Crown's exercise of discretion. As quoted above, Charron J. noted that repudiation of a plea agreement was more than a bare allegation because it was evidence that the Crown had gone back on its word. A second important aspect of a rare and exceptional event is, in my view, that the Crown's decision must implicate interests that are of "crucial importance to the proper and fair administration of justice". In *Nixon*, this interest was that plea agreements be honoured.

[55] Meeting the threshold evidentiary burden is of course only the first step that an accused faces in proving an abuse of process. If the threshold burden is met, the Crown is given an opportunity to explain the reasons behind its exercise of discretion. If no explanation is forthcoming, an adverse inference may be made against the Crown. The burden remains on the accused to establish an abuse of process on a balance of probabilities. Even if an accused establishes an abuse of process, a stay will only be warranted in "the clearest of cases". [page282]

(b) *Was the threshold evidentiary burden met in this case?*

[56] I would conclude the appellant has met the threshold evidentiary burden on the basis that the offer here was a "rare and exceptional event". The offer itself and the circumstances in which it was made are sufficient to raise the court's concern about the Crown's exercise of discretion. It constituted, in effect, an offer made directly to the accused and, given its nature, had the potential to negatively affect the relationship between the appellant and his lawyers. The proper functioning of the relationship between an accused and defence counsel is crucial to the proper administration of criminal justice.

[57] Below, I first outline why the relationship between an accused and defence counsel is essential to the proper and fair operation of the criminal justice system. I also explain why due to the role of the Crown, the Crown should not lightly take steps that will interfere with that relationship. Second, I set out the problems with the offer here, and why these problems suggest this offer was a rare and exceptional event requiring an explanation from the Crown. It follows, in my view, that the appellant has met the requisite evidentiary threshold. I would leave the issue of whether any of the circumstances complained of by the appellant constitute

evidence of bad faith or could give rise to an inference of bad faith to be decided at a new hearing.

The relationship between the accused and defence counsel and the role of the Crown

[58] The relationship between accused persons and their counsel is essential to the proper and fair administration of criminal justice. As Edward Greenspan, Q.C., said in his well-known address on the role of defence counsel (Edward Greenspan, Q.C., "The Role of the Defence Counsel in Canadian Society" (The Empire Club of Canada Addresses delivered at the Empire Club, Toronto, November 19, 1987):

> No person is required to stand alone against the awesome power of the government. Rather, every criminal defendant is guaranteed an advocate -- a "champion" against a "hostile world," the "single voice on which he must rely with confidence that his interests will be protected to the fullest extent consistent with the rules of procedure and the standards of professional conduct."
>
> . . . . .
>
> And the role of the defence counsel, the obligation the community places on him, is a societal role -- to defend the constitutional guarantees of the presumption of innocence and the requirement that in our democracy no one [page283] can lose freedom unless and until the state can prove guilt beyond a reasonable doubt. Our community can retain justice and freedom only as long as it gives standing to one person to take, within the limits of the law, the defendant's side in court and to remind society when the scales of justice are tilting in the wrong direction.

[59] It is essential that an accused person have confidence in his or her representation, and that defence counsel be free to further the accused's interests as much as possible. All lawyers have a duty to "raise fearlessly every issue, advance every argument and ask every question, however distasteful, that the lawyer thinks will help the client's case and to endeavour to obtain for the client the benefit of every remedy and defence authorized by law": The Law Society of Upper Canada, *Rules of Professional Conduct* (2014), s. 5.1-1, commentary 1.

[60] Defence counsel in particular are obliged, pursuant to s. 5.1-1, commentary 9:

> . . . to protect the client as far as possible from being convicted, except by a tribunal of competent jurisdiction and upon legal evidence sufficient to support a conviction for the offence with which the client is charged. Accordingly, and *notwithstanding the lawyer's private opinion on credibility or the merits, a lawyer may properly rely on any evidence or defences, including so-called technicalities, not known to be false or fraudulent*.

(Emphasis added)

[61] Defence counsel is therefore permitted to argue a weak defence and call the accused to testify even if the lawyer's private opinion is that the client will be disbelieved. It is only where the lawyer *knows* the testimony to be false or fraudulent or believes it to be false by reason of an admission made by the accused that the lawyer may not offer the evidence.

[62] If accused persons have reason to doubt the ability and faithfulness of their counsel, their defence is likely to suffer. If counsel has reason to hold back in the defence to protect their own interests, or even allows personal doubt about the merits to cloud their pursuit of the defence, the defence is also likely to suffer. Without a relationship of faith and confidence between an accused and his or her counsel, the obligations placed on defence counsel as set out by Greenspan -- to defend the guarantees of the presumption of innocence and the burden of proof beyond a reasonable doubt -- are put at risk.

[63] Turning now to the role of the Crown, the function of the Crown is to be "assistant to the Court in the furtherance of justice, and not to act as counsel for any particular person or party": *R. v. Boucher*, [1955] S.C.R. 16, [1954] S.C.J. No. 54, at p. 25 S.C.R. As Rand J. explained in *Boucher*, at pp. 23-24 S.C.R.: [page284]

> It cannot be overemphasized that the purpose of a criminal prosecution is not to obtain a conviction; it is to lay before a jury what the Crown considers to be credible evidence relevant to what is alleged to be a crime. Counsel have a duty to see that all available legal proof of the facts is presented; it should be done firmly and pressed to its legitimate strength, but it must also be done fairly. The role of prosecutor excludes any notion of winning or losing; his function is a matter of public duty than which in civil life there can be none charged with greater responsibility. It is to be efficiently performed with an ingrained sense of the dignity, the seriousness, and the justness of judicial proceedings.

[64] The importance of the Crown's dual role as both advocate and minister of justice was set out in the "Martin Report" (The Honourable G. Arthur Martin, O.C., O. Ont., Q.C., LL.D., Chair and the Attorney General's Advisory Committee on Charge Screening, Disclosure and Resolution Discussions, *Report of the Attorney General's Advisory Committee on Charge Screening, Disclosure, and Resolution Discussions* (Toronto: Queen's Printer for Ontario, 1993)), at p. 33:

> Crown counsel's dual role as both advocate and minister of justice, fulfilled with the utmost integrity and sound judgment, is, like the complementary roles of defence counsel and the judge, essential to the administration of justice in Ontario.

[65] The preamble to the *Crown Policy Manual* of the Ministry of the Attorney General of Ontario (Toronto: Queen's Printer for Ontario, 2005) echoes this view, at p. 2:

> The role of Crown counsel as an advocate has historically been characterized as more a "part of the court" than an ordinary advocate.
> A prosecutor's responsibilities are public in nature. As a prosecutor and public representative, Crown counsel's demeanor and actions should be fair, dispassionate and moderate; show no signs of partisanship; open to the possibility of the innocence of the accused person and avoid "tunnel vision." It is especially important that Crown counsel avoid personalizing their role in court.

(Citations omitted)

[66] The Crown's duty to act fairly, dispassionately and with a sense of the justness and dignity of the proceedings requires the Crown to treat with respect the relationship between an accused and defence counsel. The *Rules of Professional Conduct* refer to this obligation: a prosecutor "should not do anything that might prevent the accused from being represented by counsel or communicating with counsel": s. 5.1-3, commentary 1. As outlined above, the justness of a particular proceeding may depend on the strength of the relationship between the accused and counsel. An act on the part of the Crown tending to undermine the relationship could have serious consequences for the accused and, in the case of deliberate acts, would, except in exceptional [page285] circumstances, likely be out of keeping with the Crown's obligation as a minister of justice.

[67] As I explain below, one very foreseeable consequence of the offer here was that the appellant's relationship with his counsel could be undermined. In my view, because of the importance of the relationship between an accused and defence counsel and the Crown's special role, an offer made directly to the accused with this kind of foreseeable consequence raises the court's concern about the Crown's exercise of discretion. This offer constitutes a rare and exceptional event and it requires an explanation from the Crown.

The problems with the offer in this case

[68] The offer made by the trial Crown in this case had the potential to undermine the appellant's relationship with his counsel in three ways: first, the offer itself created a potential conflict of interest between the appellant and his counsel because it required the appellant to make a statement implicating his counsel in suborning perjury; second, the offer was contingent on the approval of the trial Crown's supervisor; and third, it appears the Crown attempted to resolve the matter directly with the appellant, although he was represented by counsel.

[69] Contrary to the respondent's submission, the problems with the offer do not require a presumption of bad faith on the part of the Crown. The concerns are apparent on the face of the offer itself, just as in *Nixon*, where the Crown's repudiation of a plea agreement on its face implicated the honour of the Crown without any need for a presumption of bad faith.

[70] The offer created an instant potential conflict of interest between the accused and his lawyer that could have interfered with the solicitor-client relationship. The interests of the defence lawyers were suddenly pitted against those of their client, potentially undermining the appellant's ability to rely on his lawyers and leaving him in a vulnerable position.

[71] The trial Crown alleged the appellant had perjured himself with the knowledge of his counsel in his testimony on duress, a defence he intended to advance, and was about to advance at trial. Regardless of whether the appellant accepted or rejected the offer, the potential for conflict or a negative impact on his relationship with counsel existed.

[72] The contingent nature of the offer exacerbated the potential conflict between the appellant and his solicitors. If the appellant had obtained independent legal advice as suggested, and had considered or even accepted the offer, but the trial Crown was unable to get approval for the arrangement, the [page286] appellant's relationship with his counsel of choice would likely have been irreparably damaged. He could not have gone back to his counsel of choice, having agreed to or considered providing evidence that they had suborned perjury. It is also unlikely counsel could have believed the appellant had faith in their integrity and advice,

knowing he had considered providing evidence that they had contravened their professional obligations.

[73] In my view, the trial judge erred when she concluded there was essentially no harm in the offer because if the appellant had accepted, he would not have had a trial on the merits. The contingent nature of the offer created the possibility that the appellant, having accepted the offer, would have had a trial on the merits without his counsel of choice. Even considering the offer could have undermined the appellant's relationship with counsel. It is important to bear in mind as well that the appellant's three-week jury trial was supposed to begin on the day the offer was made. Had the appellant considered or even accepted the offer, he could have lost his representation very quickly and would have been forced to search for new counsel for a three-week jury trial on serious charges.

[74] Had the offer not been conditional on approval by the Crown's superior, the risk to the appellant's relationship with counsel would have been much less significant.

[75] Finally, the trial Crown's conduct in making the offer appears to tread close to the ethical line drawn by s. 7.2-6 of the *Rules of Professional Conduct*. Section 7.2-6 provides that subject to the rules dealing with limited scope retainers and second opinions:

> 7.2-6 . . . if a person is represented by a legal practitioner in respect of a matter, a lawyer shall not, except through or with the consent of the legal practitioner
>
> (a) approach or communicate or deal with the person on the matter; or
>
> (b) attempt to negotiate or compromise the matter directly with the person.

[76] Plea negotiations fall within the scope of an "attempt to negotiate or compromise the matter". This rule precludes a Crown from negotiating directly with a represented accused. The Crown is required to negotiate "through or with the consent of" the accused's counsel. In the criminal context, the purpose of this rule is to preserve the accused's relationship with counsel, which could be seriously undermined by direct negotiations, and to protect the accused's best interests by requiring his or her advocate to be the exclusive channel for resolution discussions: [page287] see David Layton and Hon. Michel Proulx, *Ethics and Criminal Law*, 2nd ed. (Toronto: Irwin Law, 2015), at p. 659.

[77] While the appellant's trial counsel were present at this resolution discussion, the trial Crown's conduct appears to tread close to the line in two respects: it seems the offer was not made to the appellant's counsel, but rather to the appellant himself, and the trial Crown appears to have advocated for the offer directly with the appellant's father.

[78] The nature of the offer suggests the offer was made directly to the appellant. Although the appellant's lawyers were present, they would not have been able to advise him to accept the offer -- such advice would have conflicted with their own interest. This is borne out by the trial Crown's suggestion that the appellant obtain independent legal advice. If the trial Crown was negotiating directly with the appellant and ignoring the presence of counsel, this could have been in violation of s. 7.2-6.

[79] Similarly, the trial Crown apparently suggested to the appellant's father that this offer would save time and money. To the extent that the suggestion by the trial Crown amounts to

advocating in favour of the appellant accepting the offer and intended these comments to be communicated to the appellant through his father, rather than through counsel, s. 7.2-6 may also have been in play. Circumventing counsel by going through an accused's relative might be viewed to be just as contrary to the rule as speaking directly to an accused.

[80] The concern that the trial Crown might be viewed as having negotiated directly with the appellant contributes to my conclusion that the offer was a rare and exceptional event. Section 7.2-6 plays an important role in protecting an accused's relationship with counsel and best interests. Conduct by the Crown suggesting a potential violation of the rule is a serious matter. Without an explanation, it raises the court's concern about the manner in which the trial Crown exercised his discretion.

[81] For the reasons set out above, this offer could have had the effect of irreparably damaging the appellant's relationship with counsel. Conflict between the appellant and his counsel was a predictable outcome of the offer. Indeed, the offer invited it. The potential effects of the offer are sufficient to raise the court's concern about the Crown's exercise of discretion.

[82] The respondent's argument that no harm was actually done to the relationship between the appellant and his trial counsel is not relevant at this stage of the analysis. The question here is not whether the fairness of the trial was compromised as a result of the offer, but rather whether the Crown's exercise of discretion is a rare and exceptional event. [page288]

[83] In my view, in light of the importance of protecting the relationship between an accused and defence counsel, and the problems inherent in the offer in this case, the appellant has met his threshold evidentiary burden. As in *Nixon*, the Crown is the only party who is privy to the reasons behind its decision to make this offer. While the ultimate burden of proving abuse of process remains on the appellant, the Crown must provide an explanation for its decision or risk an adverse inference against it.

(c) *What is the appropriate remedy in the circumstances?*

[84] The appellant asks this court to set aside his convictions and enter a stay of proceedings, or in the alternative, to order a new trial. In my view, it would not be appropriate for this court to determine whether a stay of proceedings is warranted. A new trial is required.

[85] Although the appellant has met the threshold evidentiary burden, he has not yet proved abuse of process on a balance of probabilities. The parties proceeded in the court below on the basis that the issue of settlement privilege would be argued and decided by the trial judge first, and only after her decision would they argue the abuse of process issue. The trial judge ruled the evidence of the resolution discussion was privileged and inadmissible. The matter did not proceed to the abuse of process stage. The parties therefore never led evidence or made submissions specifically on the abuse of process point. The Crown was not afforded an opportunity to provide the reasons behind the trial Crown's decision to make this offer.

[86] In my view, a new trial is required at which, if the abuse of process application is pursued, a hearing can be held where the parties can lead evidence and the Crown will have an opportunity to explain the offer to the court. The issues of whether the appellant has made out an abuse of process and whether a stay is warranted in the circumstances should be decided on a full record. The Crown should not be penalized for the absence of an explanation given the

way the matter proceeded in the court below. The Crown should be permitted to provide an explanation or risk an adverse inference against it.

C. *Conclusion*

[87] For the reasons outlined above, I would allow the appeal and order a new trial.

Appeal allowed.

End of Document

CITATION: *Algoma Steel Inc. v. Capitol Steel Corporation et al*, 2021 ONSC 2531
COURT FILE NO.: CV-20-28
DATE: 2021-04-21

ONTARIO

SUPERIOR COURT OF JUSTICE

IN THE MATTER OF the *Construction Act*, R.S.O. 1990, c. C.30, as amended

BETWEEN:	
ALGOMA STEEL INC. Plaintiff	Brad Halfin, for the Plaintiff
– and –	
CAPITOL STEEL CORPORATION and LOOBY CONSTRUCTION LIMITED Defendants	Timothy McGurrin, for the Defendant Capitol Steel Corporation
	HEARD: February 18, 2021 by videoconference

T. A. HEENEY J.:

[1] This is a motion by the plaintiff Algoma Steel Inc. ("Algoma") to strike certain portions of the Statement of Defence and Counterclaim of the defendant Capitol Steel Corporation ("CSC"). CSC brought a cross-motion to amend its pleading in the event that the subparagraphs in question were struck. The defendant Looby Construction Limited is not involved in the motion or cross-motion and did not participate.

[2] I should deal at the outset with a preliminary procedural issue. Algoma sought leave of the court to bring their motion, as required by s. 13 of O. Reg. 302/18 under the *Construction Act*, which provides that interlocutory steps, other than those provided under the Act, shall not be taken without consent of the court, on proof that such steps are necessary or would expedite the resolution of the issues in dispute. I am satisfied that the motion is necessary, in order that any doubt about the propriety of the pleadings can be resolved at this early stage. This will help to expedite subsequent proceedings such as discoveries, since the scope of discoveries is defined by the pleadings. Accordingly, leave is granted to bring this motion.

[3] Algoma complains, though, that CSC did not seek similar relief in its cross-motion to amend, such that the cross-motion is not properly before the court. I am not convinced that this is actually required, since CSC did not initiate the interlocutory motion, it is simply responding. Once a motion to strike is before the court, it is open to the court, if a pleading is struck, to grant leave to the responding party to amend in order to cure the defect. CSC did seek leave to amend in their Notice of Motion. If they are also required to seek leave to bring their cross-motion at all, I am satisfied that it should be granted, under subparagraph (f) of their Notice of Motion, which asks for such "further and other relief as this Honourable Court may deem just", for the same reasons that apply to Algoma's motion.

The Pleadings:

[4] Before reviewing the facts, I will set out the pleadings which are in question, which will assist in understanding the relevance of the facts to the issues on these motions. In brief, Algoma argues that subparagraph 13(g) of CSC's Statement of Defence and Counterclaim pleads facts that are protected by settlement privilege. The subparagraph under attack reads as follows:

> 13(g) On or about March 20, 2020, however, Algoma acknowledged and admitted that it would be required to re-roll the Structural Steel Plate again. Its proposal was not acceptable as:
>
> (i) The time anticipated for doing so by Algoma would result in serious Project delay and expose CSC to significant damages;
>
> (ii) Notwithstanding previous attempts to re-roll the Structural Steel Plate, the product continued to exhibit Deficiencies. As such, it could not be reasonably anticipated that Algoma was capable of producing compliant product; and
>
> (iii) Algoma required that CSC execute a release of all claims arising from the late and defective supply of the Structural Steel Plate.

[5] Algoma argues that this subparagraph refers to a proposal of settlement made by Algoma in an effort to settle the dispute between the parties, which was made through a series of discussions and emails in March and April, 2020, and which communications are protected by settlement privilege. Accordingly, Algoma argues that this portion of the pleading should be struck without leave to amend, pursuant to Rule 25.11 of the *Rules of Civil Procedure*, as being scandalous, vexatious and an abuse of the process of the court.

[6] In addition, Algoma claims (in its Factum but not in its Notice of Motion) a declaration that the allegedly privileged communications are inadmissible in this proceeding.

[7] CSC denies that its pleading is offensive, and states that the discussions and emails were not settlement discussions to resolve any dispute between the parties, but instead represented efforts to deal with the quality problems they had discovered with the steel and achieve performance of an ongoing contract, while minimizing exposure for both

parties to damages and penalties arising from the delay. In the alternative, though, it proposes that if its initial pleading were found to be defective, the problem could be cured by amending it as follows:

> 13 (g) In March 2020, or by no later than about April 20, 2020, Algoma knew or ought reasonably to have known that its supply of steel remained deficient and that:
>
> i. the ongoing delays in Algoma supplying steel to the required standards had resulted in and could continue to result in serious Project delay and exposure to significant damages;
>
> ii. notwithstanding previous attempts to re-roll the Structural Steel Plate, the product continued to exhibit deficiencies, and that as such, Capitol Steel could not reasonably anticipate that Algoma was capable of producing compliant product; and
>
> iii. as time was of the essence and delay and damages accruing, CSC could neither wait on Algoma to attempt further mitigation nor agree to an amendment of Algoma's purported contractual limitations in exchange for delivery of the contractually mandated compliant steel.

The Facts:

[8] Algoma is, among other things, a supplier of steel. CSC is a fabricator and erector for structural steel projects. Both companies became involved in two construction projects, one of which involved replacement of a highway bridge in Bayfield, ON, and the other involving construction of a bridge on Highway 15 in Alberta. CSC issued purchase orders to Algoma on both projects in the summer and fall of 2019.

[9] After the materials were delivered by Algoma, CSC alleged that they did not conform to the requirements of the subcontracts, and refused to pay for them. Algoma denied that the materials were defective, but agreed to manufacture and deliver a second set of material for the Bayfield project, subject to CSC returning the original set of materials.

[10] After the second set was delivered, CSC alleged that they did not conform to the requirements of the subcontract either. They refused to pay for the materials, and refused to return the original set.

[11] The evidence is in conflict as to the nature of the telephone calls and emails that were exchanged. I should mention at this point that none of the affidavits filed have been tested by cross-examinations, the parties have not exchanged Affidavits of Documents and no examinations for discovery have yet taken place.

[12] Algoma filed no affidavit with its Motion Record, so the first party to do so was CSC, in its responding record. Aaron London is commercial director and general counsel for

CSC. In his affidavit sworn January 8, 2021, he states that he had a telephone discussion with Algoma's controller, Aaron Evans, on March 9, 2020, who confirmed that he was aware of the concerns with the steel supplied by Algoma, and the potential of liquidated damages and delay penalties. This was followed by a further call with both Mr. Evans and the president of CSC in which the deficiencies in the supplied steel were again discussed as well as the need to resolve the problem, particularly in light of the fact there would be damages and delay costs. He attested that the point of the call was not to settle any dispute or claims, but was instead "to find a path forward to complete the project work and limit and mitigate current and future damages and penalties that both parties would face." Mr. Evans confirmed that he would take this up with his quality control people.

[13] A further call occurred on March 11, 2020, where CSC requested and Algoma agreed to send their metallurgical experts to Winnipeg to conduct a quality inspection. This happened on March 13, where allegedly defective plate steel was inspected, along with girders which had incorporated the allegedly defective steel. Further discussions happened the same day, which again, in Mr. London's view, were not "settlement discussions" but were instead intended to discuss defects, consider the risk of damage claims to both parties and find ways to complete their contractual responsibilities − in other words, "to finish the job". Mr. London testified that to the best of his recollection, during none of these calls was it specified that these discussions "were to be without prejudice on account of being settlement discussions." Indeed, it would have been premature to discuss settlement because damages would not be crystalized until both projects were delivered to their clients.

[14] On March 18 to 20, a string of emails was exchanged between Mr. London and John Naccarato, VP-Strategy and Interim General Counsel for Algoma. Mr. London attested that this is the first time Mr. Naccarato injected the word "Privileged" in the subject line. He believed that the communication may have been privileged in the sense of being "common-interest privileged", as both companies were looking for a way to comply with their obligations and mitigate risk of non-performance and claims by other parties.

[15] The emails related, initially, to CSC's need to get a conformance letter from Algoma. In an email dated March 19, Jeff Ganczar, president of CSC, outlined the defects over the majority of the plate that were evident after the plates were "wheelabrated". He wanted to know if Algoma will immediately "re-roll" all of the remaining plates that had not yet been incorporated into girders, without having a full inspection of those plates, so that they could resume fabrication and minimize damages. In Mr. Naccarato's reply of March 20, he committed to re-rolling the remaining plates provided that CSC agreed to release the rejected plates for pickup by Algoma.

[16] On April 8, 2020, Mr. London and Mr. Ganczar had a telephone discussion with Mr. Evans. Mr. London attests he was advised that Algoma had discovered the root cause of their deficient supplies, and would re-roll and wheelabrate future plates for these projects at their facility to ensure that their further supply was not defective.

[17] On April 15, 2020, Mr. Naccarato sent an email to Mr. London, entitled "Privileged and Provided Solely for Settlement Purposes", enclosing a "draft settlement agreement" for his review. He closed his email with this comment: "The agreement is subject to confirmation of plates inventory and further refinement, but I suggest it's a reasonable path forward to resolve our issues." The draft agreement itself was not put into evidence.

[18] According to Mr. London, this was the first communication from Algoma that might arguably be said to have made settlement of potential claims a significant concern, as compared to all previous communications which had the primary purpose of discussing and resolving deficiencies in the steel so as to permit them to complete their project work and fulfill their contractual responsibilities.

[19] In this communication, Mr Naccarato introduced the idea of Algoma requiring a release before it would complete its contractual duty to provide compliant steel. Mr. London attested that it was not commercially reasonable for CSC to contemplate such a settlement, because significant costs were still accruing and damages had not yet crystallized.

[20] Algoma filed the affidavit of their Controller and General Manager of Information Technology, Aaron Evans, sworn January 21, 2021, in reply. He states that the teleconferences referred to in Mr. London's affidavit also included discussions on payment of the amounts due to Algoma. He also attested that upon the start of every teleconference in which he participated with Mr. Naccarato, he specifically recalled that all parties agreed that the discussions were expressly stated as being "for settlement purposes", "without prejudice" and/or "privileged", otherwise they would not participate in the call.

[21] As to the April 8 telephone call, he confirmed that it did take place, but states that it was a follow-up discussion to the without prejudice settlement discussions that were ongoing between the parties to resolve the dual issues of Algoma's outstanding accounts and the issues CSC was asserting regarding Algoma's materials. He states that it was a follow-up to a call on April 7, with respect to which Mr. London had prepared Minutes. A copy of those Minutes is attached to his affidavit, all of which has been redacted except the first item, which reads "1. Confirmation that the call is Without Prejudice."

[22] On or about April 24, 2020, CSC purported to terminate the subcontracts with Algoma, on the basis that Algoma never completed its contractual duty to supply compliant steel. It has refused to pay for the materials supplied by Algoma, or to return them. A Claim for Lien was delivered by Algoma regarding the Bayfield project on May 20, and the Statement of Claim was issued on July 9. Separate proceedings are underway in Alberta relating to the Highway 15 project.

The Law and Analysis:

[23] Rule 25.11 provides as follows:

> 25.11 The court may strike out or expunge all or part of a pleading or other document, with or without leave to amend, on the ground that the pleading or other document,
>
> (a) may prejudice or delay the fair trial of the action;
>
> (b) is scandalous, frivolous or vexatious; or
>
> (c) is an abuse of the process of the court.

[24] The decision of the Ontario Court of Appeal in *F. (M.) v. s. (N.)*, [2000] O.J. No. 2522 (C.A.) is instructive as to how the court should approach a motion under this rule. A patient made a written complaint to the College of Physicians and Surgeons alleging that her family doctor had sexually abused her. She also brought a civil action against the doctor, which was settled on the basis that he would pay her a series of payments totalling $500,000 over time. After the settlement document was signed, the patient signed a sworn statement recanting her allegations of sexual abuse. The doctor subsequently stopped making payments, and the patient sued to enforce the settlement.

[25] In his Statement of Defence and Counterclaim, the doctor specifically pleaded the sworn statement which recanted the patient's allegations. However, this pleading was struck out on a motion under Rule 21.01(1)(b), because s. 36(3) of the *Regulated Health Professions Act* provides that "no report, document or thing prepared for or statement given at such a proceeding … is admissible in a civil proceeding…". The Divisional Court dismissed an appeal of that order, and a further appeal to the Ontario Court of Appeal was dismissed by a majority decision.

[26] Laskin J.A. (Osborne A.C.J.O. concurring) held that the pleading was properly struck, although it should have been struck under Rule 25.11 and not Rule 21.01. He held that the plain meaning of s. 36(3) was clear. As the challenged paragraphs of the doctor's pleading referred to the complaint and subsequent recantation, both of which were documents prepared for the College discipline proceeding and were therefore inadmissible in the civil proceeding, the motions judge was correct in striking out the paragraphs. He said this, at para. 43:

> Rule 25.11 permits the court to strike out any part of a pleading that may prejudice or delay the fair trial of an action. A pleading of documents that are inadmissible at trial will prejudice or delay the fair trial of the action. The pleading is irrelevant to the action. Therefore the impugned paragraphs in Dr. S.'s statement of defence and counterclaim should have been struck out under Rule 25.11. In this case nothing turns on which rule was used to decide the motion. I would therefore not interfere with the decision of the motions judge or the decision of the Divisional Court.

[27] Borins J.A., in dissent, would have held that the pleading was unobjectionable. While it was a dissenting opinion, his reasons are nevertheless helpful for his review of the applicable law regarding the striking of pleadings. He said this, at para. 71:

> At a time before the term "embarrassing" had been replaced in the Rules of Civil Procedure by "scandalous," Riddell J. provided what has become the classic test in applying rule 25.11(b). In *Duryea v. Kaufman* (1910), 21 O.L.R. 161 (Ont. Master) at 168 he stated:
>
> > No pleading can be said to be embarrassing if it allege only facts which may be proved — the opposite party may be perplexed, astonished, startled, confused, troubled, annoyed, taken aback, and worried by such a pleading — but in the legal sense he cannot be "embarrassed." But no pleading should set out a fact which would not be allowed to be proved — that is embarrassing. ... Even if a pleading set out a fact that is not necessary to be proved, still, if it can be proved, the pleading will not be embarrassing. Anything which can have any effect at all in determining the rights of the parties can be proved, and consequently can be pleaded — but the Court will not allow any fact to be alleged which is wholly immaterial and can have no effect upon the result.

[28] As to the general approach to be taken on motions to strike, he said the following, at para. 81:

> The caution against exercising the power to strike out pleadings except in the clearest of cases expressed seventy-five years ago by Meredith C.J.C.P. in *Sentinel-Review Co. v. Robinson* (1927), 60 O.L.R. 93 (Ont. Master), at 97 [1927] (Ont. Master) is as valid now as it was then: "There is always some danger of a pruner cutting off a fruitful bough mistaking it for an unfruitful one."

[29] He went on to quote further from the same decision at paras. 82-3:

> Furthermore, to uphold the decision of the Divisional Court would create a dangerous precedent. The result of the decision is that whenever a party holds the belief that the evidence on which an opposing party may rely to prove a fact that he or she has pleaded may be inadmissible, that party can bring an interlocutory motion at the pleading stage, totally out of context with the evidence before the trial judge, to obtain a ruling on the admissibility of the evidence. This would enable a party, in the guise of a pleading motion, to obtain a ruling from a master, or a motions judge, that encroaches upon the traditional role of the trial judge.
>
> Should additional support for this view be required, I would refer, once again, to *Sentinel-Review Co. v. Robinson*, *supra*. In that case, Meredith C.J.C.P. reversed the order of the Master who had struck out certain paragraphs of a statement of defence in a libel action as embarrassing on the ground that the defendant would be unable to adduce certain evidence to prove the facts. Meredith C.J.C.P. had this to say at p. 98:

> It is a matter for the Judge at the trial to determine whether, as a defence to the action, or in mitigation of damages, the facts set out in the words struck out of the statement of defence are admissible in evidence at the trial of the action; and care should be taken that his rights and duties should not be interfered with; and it may be that he shall consider them as part of the surrounding circumstances that may be adduced in cross-examination or in chief, apart from mitigation. .... It should be out of the question tying, or attempting to tie, the trial Judge's hands, in that or in any other way, by an officer or Judge at chambers, and the more so without any allegation of embarrassment or suggestion of prejudice in leaving all matters to be dealt with at the trial.

[30] Care must be taken in relying on the reasons of Borins J.A. since they were in dissent. However, the area of disagreement with the majority does not appear to be on the applicable law, but rather on his view that the appeal court inappropriately assumed the role of a trial judge in determining the admissibility of relevant evidence. In his opinion, the appeal court's finding that the patient's affidavit was prepared for the purpose of a disciplinary proceeding was the foundation for its conclusion that the affidavit would be inadmissible at the trial of the action. That finding of fact was made in the absence of any evidence.

[31] Laskin J.A., in his majority reasons, had no difficulty concluding that the document which recanted the allegations was prepared for purposes of the disciplinary proceedings. It was part of a "package deal", where the patient agreed to the settlement and the doctor agreed to pay the $500,000, provided that she signed the recantation, thereby avoiding further prosecution of the doctor by the College, or at least enabling him to use the recantation in his defence in the disciplinary proceedings. He found at para. 22 that "[t]he inescapable conclusion is that Ms. F.'s recantation is a document prepared for a proceeding under the Medicine Act." Since the wording of s. 36(3) was perfectly clear, the document was inadmissible.

[32] As to the argument that the decision as to admissibility of the document should have been left to the trial judge, Laskin J.A. said this, at para. 40:

> Dr. S. contends that regardless of how s. 36(3) is interpreted the admissibility of documents is a matter for the trial judge and therefore the challenged parts of his pleading should not have been struck out on a motion. I disagree. If a paragraph in a party's pleading pleads facts that cannot be proved at trial or pleads documents that cannot be admitted at trial, that paragraph may be struck out on a motion. As Aylseworth J.A. said speaking for this court in *Roman Corp. v. Hudson's Bay Oil & Gas Co.* (1971), [1972] 1 O.R. 444 (Ont. C.A.) at 446, aff'd [1973] S.C.R. 820 (S.C.C.):

> Nor do the appellants question the Court's power, in a proper case, to dismiss an action against certain defendants if it is one which, as to such defendants, cannot possibly succeed — or to strike out all or parts of a statement of claim with respect to such defendants as prejudicing or embarrassing a fair trial or as alleging facts which a plaintiff would not be allowed to prove at trial.

[33] The important thing to note is that the pleading did not just allege underlying facts, such as that the sexual contact was consensual, which the doctor hoped to prove by way of tendering the recantation (if allowed to do so by the trial judge). Instead, the pleading referred explicitly to the document itself. In the Statement of Defence and Counterclaim it stated "On September 5, 1995 the Plaintiff executed a sworn statement recanting all or substantially all of the allegations which she had levelled against Dr. S.." The pleading went on to outline the details of that statement.

[34] Since the law was clear that the document could not be tendered in evidence, the doctor had pleaded something which he would not be allowed to prove at trial. Accordingly, the pleading was properly struck out.

[35] The lesson that can be drawn from that case is that if a party pleads a document that is clearly inadmissible at trial, it is subject to being struck out at the pleadings stage. Applied to the case at bar, the proposition advanced by the plaintiff is that the defendant specifically pleaded an offer to settle in its Statement of Defence and Counterclaim. Since the law is well settled that offers to settle are protected by settlement privilege and are not admissible at trial, it is argued that the pleading should be struck.

[36] The problem with the plaintiff's argument, though, is that the facts of this case are not as simple as those in *F. (M.)*, where there was a clear statutory prohibition against the admissibility of a document that unquestionably fell within that prohibition. Here, the question as to the whether the telephone and email communications between the parties are protected by settlement privilege involves a three-part, fact-driven analysis. The test to be met is outlined by the Ontario Court of Appeal in *Re: Hollinger Inc.*, 2011 ONCA 579 at para. 16:

> It is well established that in order to foster the public policy favouring the settlement of litigation, the law will protect from disclosure communications made where;
>
> 1) there is a litigious dispute;
>
> 2) the communication has been made "with the express or implied intention it would not be disclosed in a legal proceeding in the event negotiations failed;" and
>
> 3) the purpose of the communication is to attempt to effect a settlement: see Bryant, Lederman & Fuerst, *The Law of Evidence in Canada*, 3d ed.

> (Markham: LexisNexis, 2009) at p. 1033, § 14.322); *Inter-Leasing Inc. v. Ontario (Minister of Finance)* (2009), 256 O.A.C. 83 (Ont. Div. Ct.).

[37] It is well settled that the use of the words "without prejudice" is not determinative of any right of settlement privilege: Lederman, Bryant & Fuerst, *The Law of Evidence in Canada*, 5th Ed. (Markham: LexisNexis, 2018) at paras. 14.350 – 14.352 and 14.354. Here, there is a live dispute between the parties as to whether their communications in March and April 2020 were conducted on a without prejudice basis. There is also a real issue as to whether the purpose of such communications was to "settle" a "litigious dispute" between the parties, as opposed to a mutual effort to overcome the alleged quality issues and complete their contractual obligations, i.e. "to finish the job". In such circumstances, the comments of Brown J. in *Lakeside Steel Corp. v. White*, 2007 CarswellOnt 3311 (S.C.J.) at paras. 14-15 are apt:

> From the evidence filed by the parties it is clear that a live dispute exists as to whether some or all of the discussions that took place at the June 11, 2006 meeting were conducted on a without prejudice basis. While I acknowledge that in *Canadian Gateway Development Corp. v. National Capital Commission*, [2002] O.J. No. 3167 (Ont. Master) (Master), Master Beaudoin, at paragraph 12, stated that "where there are competing versions of an event, the Court must determine the issue of privilege after considering all of the circumstances under which the communication was made", in some cases such a determination may be difficult to make prior to trial.
>
> In my opinion, this is such a case. To determine whether the discussions that took place on June 11, 2006 were in furtherance of settlement and cloaked with privilege would require making factual findings, including findings of credibility amongst the affiants. In my view, on a Rule 25.11 motion a court is not equipped to make factual findings based on contested evidence solely using affidavits filed by the parties on which no cross-examination has occurred.

[38] Furthermore, even if Algoma was able to satisfy me that all three factors outlined in *Hollinger* have been established, there are exceptions to the exclusionary rule "when the justice of the case requires it": *Sable Offshore Energy Inc. v. Ameron International Corp.*, 2013 SCC 37 at para. 12. It is difficult to imagine how a court could decide what the justice of the case requires, based only upon the pleadings and untested affidavit evidence that is in conflict.

[39] On the record before me, I am not well-positioned to be making the findings of fact necessary to engage in the factual analysis outlined in *Hollinger*, nor is it appropriate that I do so on a Rule 25.11 motion. The Ontario Court of Appeal, in *Quizno's Canada Restaurant Group v. Kileel Development Ltd.*, 2008 ONCA 644, at para. 16, cautioned against making determinations of the admissibility of evidence at the pleadings stage:

> Pleadings are not the appropriate stage in an action to engage at large in what is essentially a trial judge's exercise for determining the admissibility

> of evidence at trial — i.e., weighing the probative value versus prejudice of facts. That exercise is not particularly well-suited to defining issues for trial, something which is for the parties to decide. Rule 25.11 provides that the pleading may be struck if it "may prejudice the fair trial of the action." A fair trial requires that the defendant be able to put forward a "full" defence, not — as the motion judge erroneously concluded — a "reasonable" defence defined in advance by the plaintiff and the court.

[40] The plaintiff has asked me to do exactly that: to make a pre-emptive ruling that the communications of March and April 2020 are inadmissible. I am not prepared to do so, and will leave that for the trial judge.

[41] For present purposes, though, it seems to me that it is not necessary to make a ruling one way or the other, because any risk that the present pleading might be referring to privileged communications can be avoided by amending the pleading as proposed by the defendant.

[42] The impugned pleading refers to a “proposal”. This may or may not be a proposal of settlement of a litigious dispute, but what really matters for purposes of CSC’s defence are the underlying facts that led to that proposal. Those would include knowledge that the steel had defects, what the root causes of those defects were, that such defects might be remedied by re-rolling the steel, and so on. The proposed amended pleading avoids that potential problem by focussing instead on what the plaintiff “knew or ought reasonably to have known”. That pleading is, in my view, entirely unobjectionable. Whether the defendant will be allowed to rely on the communications between the parties in March and April 2020 to prove that allegation will be a matter for the trial judge to determine.

[43] Algoma’s response to the proposed amended pleading is not that it, on its face, pleads facts protected by settlement privilege, but rather that the evidence that CSC relies upon to support the pleading is the same allegedly privileged series of discussions and emails. It relies on CSC’s Response to Demand For Particulars in this regard. I reject this argument. The motion and cross-motion are all about the pleadings, not about the evidence. While the discussions and emails are the evidence that CSC is currently able to point to that support these allegations, it may well be that other evidence will emerge through the discovery process or otherwise that also supports these allegations. Even if I were prepared to make a ruling that the discussions and emails are inadmissible, which I am not, it would be entirely inappropriate for me to deny CSC the right to plead the case that they want to plead, on the basis that they don’t, at present, have admissible evidence to support this particular allegation. It will be for the trial judge to determine whether or not CSC has proven this allegation, on a full evidentiary record.

[44] This distinguishes the present case from *F. (M.)*, where the pleading relating to the recantation document was incapable of proof without tendering the inadmissible document itself. Here, it remains to be seen at trial whether the defendant can prove the allegations in its proposed amended pleading.

[45] Counsel for Algoma also took issue with the wording in subparagraph (iii) of the proposed amended pleading, which says: "… CSC could neither wait on Algoma to attempt further mitigation nor agree to an amendment of Algoma's purported contractual limitations…". The argument is that this pleading implies that there was an offer made by Algoma, which CSC could not agree to. I reject this argument. The proposed pleading does not refer to any offer made by Algoma, but is entirely focussed on the corporate state of mind of CSC.

[46] Accordingly, an order will go that subparagraph 13(g) of CSC's Statement of Defence and Counterclaim shall be struck, and replaced with the new subparagraph proposed in CSC's cross-motion. CSC shall serve and file a Fresh as Amended Statement of Defence and Counterclaim within 15 days. Algoma shall have leave to make any consequential amendments to its Reply and Defence to Counterclaim within 15 days thereafter, should it wish to do so.

[47] With respect to costs, my preliminary view is that success has been divided. The order I have made represents a middle ground, which eliminates any explicit reference to settlement proposals as desired by Algoma, while allowing CSC to plead the case it wants to plead. Accordingly, the appropriate order might be that costs shall be in the cause. I am, however, open to considering the submissions of counsel on the costs issue if they choose to pursue it. If so, Algoma shall file brief written submissions within 15 days, with CSC's brief response to be filed within 10 days thereafter and any reply within 5 days thereafter. Failing that, costs of the motion and cross-motion will be in the cause.

T. A. Heeney J.

Released: April 21, 2021

CITATION: *Algoma Steel Inc. v. Capitol Steel Corporation et al*, 2021 ONSC 2531
COURT FILE NO.: CV-20-28

ONTARIO

SUPERIOR COURT OF JUSTICE

BETWEEN:

ALGOMA STEEL INC.

Plaintiff

– and –

CAPITOL STEEL CORPORATION and LOOBY CONSTRUCTION LIMITED

Defendants

REASONS FOR JUDGMENT ON A MOTION

T. A. Heeney J.

Released: April 21, 2021

CITATION: L'ABBÉ v. ALLEN-VANGUARD, 2011 ONSC 7575
COURT FILE NOS.: 08-CV-43188 & 08-CV-43544
DATE: 2011/12/23

SUPERIOR COURT OF JUSTICE - ONTARIO

RE: Richard L'Abbé et. al. v. Allen-Vanguard Corporation

Allen-Vanguard Corporation v. Richard L'Abbé et al

BEFORE: Master MacLeod

COUNSEL: Thomas. G. Conway, Christopher Hutchison & Calina N. Ritchie for the "offeree shareholders"

Eli S. Lederman for the "Allen-Vanguard parties"

REASONS

[1] Allen-Vanguard Corporation purchased the shares of Med-Eng Systems Inc. in September of 2007. In simplest terms this litigation is because Allen-Vanguard alleges it overpaid for those shares and seeks to recoup part of the purchase price out of a $40 million escrow fund. The central issue is whether or not Allen-Vanguard was negligently or fraudulently misled concerning the fundamentals of the business.

[2] These actions are case managed but it has also been necessary to hear certain formal motions. I have released two previous sets of reasons dealing with production and discovery.[1] The issue before the court on this occasion is privilege asserted by Allen-Vanguard over a massive list of documents. There are approximately 6,000 documents listed in a more than 1,000 page Schedule B to the affidavit of documents.

[3] I have approached this firstly by discussing certain general principles and how broad claims of privilege play out in the context of this particular litigation. I have taken the time to carefully consider first principles for two reasons. Firstly I am hoping that general declarations of principle will guide the parties in resolving or avoiding further procedural disputes. Secondly as we gain experience with new requirements of discovery planning and e-discovery, it is important to leave clear signposts for others to follow. The issues raised by this motion have broader implications.

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[1] See. *L'Abbé v. Allen Vanguard Corporation* 2011 ONSC 4000 (Master) & 2011 ONSC 7331 (Master)

[4] The reasons next deal with a specific set of documents that were inadvertently disclosed and included in Schedule A and then with the Schedule B documents. Court inspection of 6,000 documents is not a viable option and I have placed the obligation of narrowing the parameters of the dispute in relation to those documents on the parties. I have given direction regarding procedural collaboration, creative solutions and time frames.

[5] The motion highlights the need for new ways of dealing with documentary production in big document cases and in particular in cases dealing with large amounts of electronically stored information.

[6] I have concluded that Allen-Vanguard has inappropriately asserted privilege over broad categories of documents including due diligence documents and virtually all communication with a host of legal advisors including in house counsel. Counsel for Allen-Vanguard recognizes there is work to be done. He has suggested that the motion was premature and there were better tools available to refine the privilege claims than such a blunt instrument. I would agree with this but for the fact that it was Allen-Vanguard which certified its affidavit of documents as complete and makes the sweeping claims of privilege. Given the inordinate delay that has already stalled documentary production, I am not inclined to be too critical of the response.

Background

[7] Allen-Vanguard paid more than $640 million for Med-Eng. At issue in the litigation is a $40 million escrow fund held back from the purchase price. Allen-Vanguard advances claims against the fund for breach of specific warranties in the agreement of purchase and sale. It also claims to have been misled about the value of Med-Eng and accuses former Med-Eng management of misrepresentation and fraud.

[8] As I have pointed out in the previous decisions there are some features of the manner in which the agreement of purchase and sale and the subsequent litigation are structured which complicate questions of production and privilege. These are as follows:

a. The offeree shareholders are not accused of any wrongdoing but are the defendants to Allen-Vanguard's claim. This is because under the agreement the escrow fund (part of the purchase price) is the property of the offeree shareholders unless Allen-Vanguard proves its claims.

b. The former Med-Eng senior managers are accused of fraudulent and negligent misrepresentation with the purpose of inducing Allen-Vanguard to pay an inflated price and to proceed with the transaction but they are not parties. No relief is claimed against them by Allen-Vanguard. No third party claim has been asserted by the offeree shareholders.

> c. Med-Eng (AVTI) is not named as a party by Allen-Vanguard because it is fully owned and managed by Allen-Vanguard and in fact is now amalgamated with Allen-Vanguard. Yet the warranties which are said to have been breached are expressed to be warranties given by Med-Eng itself. Moreover Med-Eng would have been vicariously liable for the acts of its officers and directors. But the only remedy for breach of the warranties is a claim against the escrow fund and the only remedy Allen-Vanguard seeks for misrepresentation is also a claim against the fund.[2]

[9] Consequently the wrongdoing is asserted against non parties and the remedy is sought against parties who are not accused of wrongdoing though they are the beneficiaries by virtue of receiving the allegedly inflated purchase price. Had the remedy not been limited to the fund and had Allen-Vanguard and Med-Eng remained separate entities, one would have expected the former managers, the corporation and the offeree shareholders to be co-defendants. It should be noted that there is no claim by the former Med-Eng that the former senior managers were not acting in the best interests of the corporation.[3]

[10] Central to the litigation are the questions of what representations were actually made, whether they were false and the extent to which Allen-Vanguard relied upon those representations. The critical issue is the valuation of Med-Eng shares and therefore of the value it was reasonable to attribute to the business of Med-Eng at the time of the purchase. Thus it is not so much the accuracy of Med-Eng financial statements that is in question but what was known and what should have been known concerning financial and cash flow projections, future opportunities and risks; in particular the risks associated with key military contracts.

[11] There are a number of specific misrepresentations alleged in the statement of claim. These can be found under the headings, "misrepresentation of MES revenue profile", "misrepresentations with respect to contingent and other liabilities", "misrepresentations with respect to status of MES contracts and commitments" in the latter half of the statement of claim. Importantly for purposes of this motion, however, the claim contains the following general assertions:

> "MES made a number of misrepresentations as to its expected bookings, revenue and earnings and as to the status of MES's customer relationships ..."

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[2] The agreement contains the following provision:
(5) The Indemnification Escrow Amount shall be the Purchaser's sole recourse in the event of a successful Claim made by the Purchaser against the Corporation or the Shareholders except in respect of liability of any Shareholder for a Claim based on the absence of, or deficiency in, the title of that Shareholder to its shares, or liability under any Claim attributable to fraud of that Shareholder.

[3] There is separate litigation against former vice President Paul Timmis who remained in place at AVTI after the takeover. That litigation does assert breach of duty to the corporation although it also raises many of the same issues as alleged in this litigation. The Timmis matter is not before me at the moment.

> "These representations were made knowing that Allen-Vanguard would rely on such representations and were made to induce Allen-Vanguard to enter into the transaction and to pay an inflated purchase price."
>
> "MES represented ... that there had been no Material Adverse Effect which could reasonably be expected to be materially adverse to the business, assets, liabilities, financial condition or results of operations of the corporation since June 30, 2007."
>
> "MES further represented ... that there were no suits or proceedings pending or threatened which could materially adversely affect the corporation"
>
> "... the former management of MES knew or ought to have known that these orders were unlikely to generate the revenue which had been projected or were unlikely to even materialize at all."
>
> "... The projections with respect to MES's expected revenue, earning and bookings, were made by the management of MES, knowing that they would impact on Allen-Vanguard's desire to enter into the transaction and the price it would be willing to pay for MES."

[12] In the statement of defence there are specific contractual defences. The offeree shareholders deny that any wrongdoing by the non party former managers can trigger a claim against the escrow fund which they say is limited to satisfying any breaches of the specific warranties. More generally however, the offeree shareholders plead that there were no misrepresentations and in any event deny that Allen-Vanguard relied on any representations not contained in the contract. They deny any damages flowing from the alleged breaches and they put failure to mitigate in issue.

[13] Because Allen-Vanguard is asserting claims of negligent and fraudulent misrepresentation in the formation of the contract and setting of the price, knowledge and reliance are critical issues. This puts in play the state of knowledge of both parties, what communication took place, what independent inquiries were made or should have been made. The extent of due diligence by both parties will be in issue. A great deal of the communication between the parties and with proposed lenders leading up to the closing of the transaction is potentially relevant. Since the accuracy of projections and risk is in issue, as is failure to mitigate, what subsequently occurred and why will also be relevant. This list is not exhaustive.

[14] Given the issues raised by the pleadings, and the fact that Allen Vanguard gained control of all Med-Eng documents, computers and the remaining employees following the closing, it is perhaps not surprising that Allen Vanguard has identified many thousand potentially relevant documents.

[15] In my earlier reasons[4], I outlined some of the difficulty and delay involved in the documentary production to that point. Allen Vanguard had originally identified 600,000 potentially relevant documents and had then narrowed those to closer to 400,000 for review. Almost 10,000 documents were ultimately identified as relevant and not subject to privilege. Those documents are now listed in Schedule A to the affidavit of documents.

[16] There are two main issues raised by this motion. The first has to do with documents over which privilege is claimed but were inadvertently released to the offeree shareholders. The court must determine whether these documents are privileged and if so whether the privilege has been lost or waived. The second issue is the 6,000 documents that are listed in Schedule B. These by definition are documents that Allen Vanguard has identified as relevant but over which privilege is claimed. That claim of privilege is challenged. The onus is on Allen-Vanguard to prove that the Schedule B documents are properly privileged.[5]

[17] In addition to the evidence set out in the affidavit of documents itself, Allen-Vanguard has filed additional affidavit evidence in support of the claims of privilege. Only two of the disputed documents were provided for court inspection as part of the motion material.

General Principles

[18] Before dealing with the specific documents, it seems important to discuss general principles.

The need for collaborative discovery planning

[19] First and foremost, when dealing with vast numbers of documents, particularly electronically stored information, the parties ought to be devising methods for cost effectively isolating the key relevant documents and determining claims of privilege To the extent that there is disagreement about the scope of relevance or privilege, it may be necessary to obtain rulings from the court but the onus is on counsel to jointly develop a workable discovery plan and to engage in ongoing dialogue.[6]

[20] Allen-Vanguard complains that this motion is premature. Rather than launch a motion challenging the 6,000 claims for privilege, Allen-Vanguard argues that the offeree shareholders should have asked specific questions about the documents and the circumstances giving rise to privilege. While that might well have been a useful discussion in the context of discovery planning, Allen-Vanguard has declared that

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[4] *Supra @ note 1*
[5] *Ansell Canada Inc. v. Ions World Corp*. (1998) 28 C.P.C. (4th) 60 (Ont. Gen. Div.)
[6] Rules 29.1 in particular subrules 29.1.03 (3) (a) and (4), 29.1.04 and Sedona Canada Principles 2, 4, 7 & 9

every one of these documents are privileged. As such, the onus is on Allen-Vanguard to justify the claims of privilege. The offeree shareholders are of course entitled to cross examine on the affidavit of documents during discovery and indeed certain questions were addressed to Mr. Luxton. There is however no requirement for the offeree shareholders to ask questions about every individual document before calling on Allen-Vanguard to justify its privilege claims.

[21] I accept that faced with this volume of documents, new approaches must be adopted but this cannot be a unilateral exercise. It requires ongoing procedural collaboration with court direction if necessary. Collaboration will not always result in agreement but where agreement is not possible, transparency should be the order of the day. Faced with this number of documents, the parties and the court must re-evaluate traditional approaches. Caselaw developed for manageable numbers of paper based documents must also be re-evaluated. Painstaking scrutiny of each individual document is disproportionate to the objective and unjustified even for a claim of this magnitude. Technology must be harnessed. Creative solutions need to be embraced. Counsel owe it to their clients and to the administration of justice to find efficiencies without, obviously, sacrificing the objective of a just outcome.

[22] The notion that the court or even the parties themselves should manually review 6,000 Schedule B documents is unworkable, impractical and unduly resource intensive. In this case the parties are using outside e-discovery experts and they have agreed on a number of important protocols such as format, coding, data fields and electronic exchange of documents but when it comes to the substantive questions of relevance and privilege they appear to be working in isolation. Rather than unilateral decision making, collaboration between counsel and their respective experts might yield some promising efficiencies.

[23] Various e-discovery solutions are available including software solutions such as predictive coding and auditing procedures such as sampling. It is naive to expect complete procedural agreement in an adversarial system but there should be a mutual interest in identifying critical documentary evidence while preserving legitimate claims for privilege.[7] Suffice to say traditional approaches to production motions cannot be used for production on this scale.

[24] Even with $40 million at stake, efficiency and cost effectiveness in production and discovery should be a mutual goal. Questions of relevance and privilege must be answered of course but it is necessary to apply those filters in a practical manner. Central to that exercise is to ensure that both relevance and privilege claims are properly focused and calibrated. Adjudication may be an important part of that

[7] In my previous reasons, I referred the parties to the Sedona Co-operation Proclamation.

exercise. Equally or more important is the need for collaborative and creative goal oriented problem solving by the parties and their respective counsel.

The scope of relevance and privilege

[25] Generally speaking when huge numbers of documents are identified as potentially relevant, one suspects the ambit of relevance is being drawn too widely. Perhaps a more useful goal than mere relevance would be to consider utility. The massive number of documents identified as relevant suggests a failure to think clearly about probative value, and the matters which ultimately may have to be proven at trial.

[26] I recognize that the ambit of relevance is broadly sketched by these pleadings but no one can possibly believe 10,000 Schedule A documents will actually be introduced into evidence at trial or that there are 6,000 critical Schedule B documents that can legitimately be withheld. The objective should be to isolate the documents that actually have probative value – that prove or disprove the disputed allegations. In the remote event that all those documents are actually important, then what is really necessary is a form of audit and review. In that case the documents will ultimately be distilled through the lens of expert testimony. Indeed, access to the source documents by experts may well be a necessary solution in a case such as this.

[27] Turning to the specific claims of privilege, it is obvious those claims have also been drawn too broadly. Allen-Vanguard has asserted privilege over all of the due diligence documents and over almost all documents sent to or from its legal counsel. As I will discuss in a moment, that may have been an appropriate starting point for internal review but it is not an appropriate position at this stage in the litigation.

Solicitor-Client Privilege

[28] More accurately referred to as client & lawyer privilege, there is no question that the privilege which exists between a client and his or her lawyer is now regarded as a fundamental civil and legal right.[8] Moreover it is a right that is critically important to the administration of justice and as such it is one of the rare class of privileges which cloaks the communication with presumptive inadmissibility.[9] Solicitor client privilege must therefore be taken very seriously. It is so important that no matter how important or probative the information might be, the truth seeking function of the justice system must generally yield to the importance of maintaining the privilege. Conversely of course it is important to confine claims of privilege to their proper ambit. Inappropriate claims of privilege cannot be permitted to shield admissible evidence from disclosure. Misuse of privilege is to debase it.

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[8] *Canada v. Solosky* [1980] 1 S.C.R. 821 (S.C.C.)
[9] *R. V. Gruenke* [1991] 3 S.C.R. 263 (S.C.C.); *Blank v. Canada* [2006] 2 S.C.R. 319 (S.C.C.)

[29] There is no dispute about the essential requirements for privilege to attach to a document. The privilege attaches to written or oral communication which was confidential in nature and is between a client and a lawyer in relation to seeking, formulating or giving of legal advice. The privilege may extend to information conveyed between the client and lawyer through an agent or other intermediary. The objective of the privilege is to ensure that effectual legal assistance may be obtained by fully and frankly disclosing all material facts to the lawyer in confidence.[10] It is however the communication between the client and the lawyer that is privileged and not objects or documents that otherwise exist.[11] Simply providing a document that is otherwise not privileged to a lawyer in order to obtain legal advice does not render the document itself a privileged document. Consequently attachments to privileged e-mails may or may not be privileged themselves.

Litigation Privilege

[30] I need not say much about litigation privilege at this point as it is generally understood to be a type of privilege which may overlap with solicitor client privilege but is not identical to it. Litigation privilege exists for the proper functioning of the adversary system and it is essentially designed to protect litigation strategy. It is a form of privilege that is not permanent and may end when the litigation ends. Providing documents have been created for the dominant purpose of use by counsel in the litigation process, they will be privileged. [12]

Settlement Privilege

[31] I do need to say something about claims for privilege over settlement discussions. This is an area of law which has been evolving. It has long been understood that offers to settle litigation are privileged within the context of that litigation. Specifically the trier of fact should not be aware of the offer before rendering a decision. This is to avoid the decision being tainted by the idea that an offer is an admission of liability or to avoid the assessment of damages being coloured by the quantum of an offer. Formal offers to settle are specifically protected by the Rules of Civil Procedure.[13] All communications made in mediation are also deemed to be without prejudice settlement discussions.[14]

[32] Settlement discussion privilege has gradually been more broadly recognized. It goes beyond offers and it is not confined to mediation. All discussions intended to

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[10] Sopinka, Lederman, Bryant, *The Law of Evidence in Canada*, *3rd edition*, 2009, @ p. 925
[11] Sopinka, Lederman, Bryant, supra @ para 14.60, p. 932
[12] *General Accident Assurance Co. v. Chrusz* (1999) 45 O.R. (3d) 321 (C.A.)
[13] Rule 49.06
[14] Rule 24.1.15

resolve litigation, including discussions that take place in contemplation of the litigation should now be considered inadmissible in the litigation at least until after the trial.[15] This is not a privilege that attaches to contractual negotiation generally. The privilege will apply if litigation is in existence or in contemplation; if the communication is made with the express or implied intention that it will not be disclosed to the court in the event the negotiations fail; and, if the purpose of the communication is to effect a settlement or buy peace.

[33] Like litigation privilege, and unlike solicitor client privilege, this privilege is not a substantive rule of law nor is it a fundamental civil right. It will yield more readily in the balance between truth seeking and preservation of confidence. That is to say that it is not as important as solicitor client privilege. Also like litigation privilege, it is not a durable privilege. It exists only for a transitory purpose and that is to encourage settlement by ensuring that settlement discussions do not prejudice the parties if litigation must continue.

Waiver of Privilege

[34] I will come back to the question of waiver more than once. Privilege may be waived by the party entitled to rely upon it. But waiver may be inferred. The two most common methods of attracting an inference of waiver are either releasing the information so that it is no longer confidential or by putting the privileged advice in issue in the litigation. Once privilege has been waived, the privilege is gone over the entire subject matter of the communication because a party may not "cherry pick".[16]

[35] As I will discuss shortly, I am of the view that the pleadings in this action constitute a waiver over any privilege attaching to due diligence. This is an example of the second method. Disclosure of privileged information to third parties or to the other side in the litigation may be an example of either explicit or implicit waiver because it demonstrates that the client no longer considers the privileged information to be confidential.

[36] It follows however that inadvertent disclosure – if it is truly inadvertent – should not be treated as a waiver of privilege unless the party making the disclosure is truly reckless or delays in reasserting the privilege or certain other conditions are met.

Inadvertent Disclosure

[37] I need not say a great deal more than that about inadvertent disclosure. Privilege is not waived by disclosure unless the party making the disclosure intended to waive

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[15] See *TDL Group Ltd. v. Zabco Holdings Inc.* 2008 MBQB 86; 227 Man.R. (2d) 66 (Man.Q.B.) @ paras 20 - 32
[16] *Guelph (City) v. Super Box Recycling Corp.* (2004) 2 C.P.C. (6th) 276 (S.C.J.) @ para 78 - 80

privilege and was authorized to do so.[17] On the other hand privilege may be lost through inadvertent disclosure based on considerations such as the manner of disclosure, the timing of disclosure, the timing of reassertion of privilege, who has seen the documents, prejudice to either party and the requirements of fairness, justice and search for truth.[18] Both parties referred to the same authorities and the law in this area is not seriously in dispute.

[38] In cases involving large numbers of documents, it must be expected that some privileged documents might inadvertently be disclosed. This is frequently addressed in discovery plans by way of clawback agreements.[19] Inadvertence will not by itself amount to waiver but this does not mean the court will protect a party from reckless release of privileged documents.[20] In any event notwithstanding the attempt to reassert privilege, the court may determine that privilege has been lost and may decline to permit the documents to be removed from Schedule A of the affidavit of documents.

[39] Of course the court may inspect the documents that have been released in addition to the evidence when determining the matter. There are at least three possible findings: the documents are not privileged documents; the documents would ordinarily be privileged but privilege has been waived (explicitly or implicitly); or the documents would ordinarily be privileged but it would be unjust to require them to be returned. In my view the latter would be extraordinary. Ordinarily inadvertent disclosure will not constitute waiver and if privilege is reasserted in a reasonable and timely manner, the documents should be ordered returned and removed from Schedule A.

Due Diligence & Privilege

[40] One of the categories of documents over which privilege is claimed is due diligence conducted by Allen-Vanguard as part of the decision to purchase the Med-Eng shares or as part of the process of raising financing. In effect these are the same thing because Allen-Vanguard's decision whether or not to proceed with the transaction was contingent on satisfying its lenders and raising the necessary capital.

[41] Due diligence needs to be properly understood. It is a phrase susceptible to different meanings. It has been described as a "malleable concept that is used in both corporate and regulatory law, with origins in the tort law concept of the

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[17] *Guelph (City) v. Super Box Recycling Corp*. supra @ para. 90
[18] *Dublin v. Montessori Jewish Day School of Toronto* (2007) 85 O.R. (3d) 511 (S.C.J.)
[19] See Sedona Canada Principle 9
[20] *Air Canada v. Westjet* (2006) 81 O.R. (3d) 48 (S.C.J.)

reasonable person."[21] In other words due diligence ordinarily means demonstrably meeting a standard of reasonable care. In corporate and securities practice, "due diligence" describes a prospective buyer's or broker's investigation and analysis of a target company, property or security.[22]

[42] Of course the regulatory and corporate worlds are related. As a publicly traded company seeking additional investment and subject to prospectus requirements, "due diligence" in making a major acquisition may be a necessary component of defence to subsequent civil or criminal prosecution under securities and other legislation. The agreement contemplated a public offering by Allen-Vanguard but the due diligence conducted with an eye to regulatory compliance in this case cannot be readily separated from due diligence conducted to decide whether or not to close the transaction. In the context of my reasons, "due diligence" refers to the steps taken by Allen-Vanguard to assess the merits and risks of proceeding with the purchase of Med-Eng at the agreed upon price.

[43] In mergers and acquisitions generally there is a time period during which the proposed purchaser has the right and obligation to satisfy itself of the quality of the investment. This is often a multi step process in which there must first be tokens of good faith and commitment. In exchange, the proposed purchaser is given complete access to the target company in order to drill down deeply into the books, records and operations of the company and to satisfy itself that it should proceed with the transaction. Often subsumed under the rubric of "due diligence", the searches and investigations conducted on behalf of the prospective purchaser or investor are frequently co-ordinated by transactional counsel. Due diligence reports and audits will usually be reviewed or even commissioned by counsel. While frequently extremely complex, in essence these pre-closing investigations are similar to searches, inspections, surveys and environmental audits regularly conducted in residential or commercial real estate transactions. Typically the purchaser has an option to terminate the agreement if not satisfied with the results.

[44] In agreements to acquire or invest in a business due diligence is often broken down into a series of audits or tests such as financial audits, marketing audits, production and inventory audits, management audits, risk analysis, and of course legal opinions. Clearly there is a legal component to much due diligence.

[45] In particular, lawyers may be asked to opine concerning regulatory compliance, contractual interpretation, or prospects of litigation. Legal analysis is frequently part of risk analysis. It would be odd if it were otherwise. Contracts will have to be interpreted. The risk of litigation will have to be analyzed. Regulatory risks in

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[21] Archibald, Hon. Todd L. et. al., *Regulatory and Corporate Liability: From Due Diligence to Risk Management*, Canada Law Book, 2009 – 2011, p. 4-1

[22] *Black's law Dictionary*, *9th edition*, p. 523

different jurisdictions must be assessed. Clauses will have to be drafted or interpreted during the negotiation process. Lawyers are frequently in the thick of merger and acquisition work. But not all of that work and certainly not all of the accounting or other work done in support of that work can attract solicitor client privilege

[46] It is important to remember that the ultimate objective of these inquiries is a business decision – whether or not to proceed with the purchase or whether or not to lend money to fund the acquisition. In that sense the ultimate outcome is not a legal opinion but business advice. Most of the inquiries made in support of the due diligence processes are not legal inquiries and they are not gathered for the purpose of giving legal advice.

[47] Additionally, the legal opinions forming part of due diligence are for the most part opinions based not on confidential information of the client as would ordinarily be the case but based on confidential information disclosed by the target corporation. It may be concluded that not all aspects of due diligence are subject to solicitor client privilege and those which might yield to different policy considerations when assessing whether or not privilege has been waived.

[48] It is here that Allen-Vanguard has it backwards. In their factum they seek to bring all of the due diligence inquiries conducted by accountants or others under the umbrella of solicitor client privilege. This is because these inquiries inform the giving of legal advice. In my view however the legal advice is ancillary to the fundamental inquiry whether or not to make the investment. The legal opinions inform the investment decision.

[49] Finally there is the question of waiver. Due diligence or lack thereof is at the very heart of this proceeding. Allen-Vanguard cannot claim to have been misled if it already knew the risks associated with the purchase. Moreover the analyses conducted at the time are pertinent to determining if the information conveyed to Allen-Vanguard can be said to be materially misleading or false. It cannot be open to Allen-Vanguard to take the position that it was misled by representations which it now says were false and then refuse to disclose what due diligence was carried out and what information was available to it through the due diligence process. In fact it will also be relevant to know what if any searches or inquiries Allen-Vanguard should have undertaken but failed to do. Implicit in the very notion of due diligence is a standard of reasonable care.

[50] There is authority to the effect that putting state of mind in issue when legal advice formed part of the basis for that state of mind should be regarded as waiving privilege.[23] Similarly in my view by implicitly putting due diligence in issue there is

[23] *Toronto-Dominion Bank v. Leigh Instruments Ltd. (Trustee of)* (1997) 32 O.R. (3d) 575 (Ont. Gen.Div.)

waiver of privilege over legal advice integral to the pre-closing inquiries and searches. To avoid the limitations of liability in the contract Allen-Vanguard may have to show that the risks that materialized were not within the contemplation of the parties when the agreement was signed.

[51] In summary, I do not rule out the possibility that there are legal opinions over which privilege may legitimately be maintained. For example it may be that legal advice concerning regulatory compliance by Allen-Vanguard itself or in relation to its lenders following the sale can be distinguished from work done to assess the merits of the investment, to accept the price, to waive conditions and to proceed with the purchase. In general however I would hold that any privilege existing over Allen-Vanguard's due diligence has been waived and exceptions would have to be justified on a case by case basis. But even if that is incorrect, in my view financial analysis and similar audits forming part of Allen-Vanguard's pre-closing investigation of Med-Eng's business never attracted solicitor client privilege even if those investigations were co-ordinated by counsel.

[52] This is because the ultimate objective was business advice and not legal advice. It is certainly possible to have privileged legal advice obtained for business purposes and it is not always possible to draw a bright line between legal and other advice. It is clear however that purely business advice, even if given by a lawyer, is not subject to solicitor client privilege.[24] It is even less likely that purely business advice sent to a lawyer or assembled in the office of a lawyer attracts such privilege.

[53] For all of these reasons, I conclude that the due diligence documents are not inherently privileged. Any claims of privilege over specific components of the due diligence will have to be shown to be exceptions. That would require that they be either legal advice or documents created for the principal purpose of obtaining such advice and that also survive any deemed waiver of privilege created by these pleadings.

Whose privilege is it?

[54] Another consideration in assessing privilege claims is the question of who is inside the privilege tent. In the course of conducting due diligence a great deal of information including financial information, business practices, trade secrets and even legal opinions that would normally be held confidential by the target corporation is shared not only with the purchaser but also with prospective lenders, outside review agencies and with counsel for the vendor offeree shareholders. Contractual provisions are ordinarily in place to ensure that misuse is not made of this information, that it retains its character as proprietary confidential information and that all copies of the information are returned if the transaction does not

[24] *R. v. Campbell & Shirose* [1999] 1 S.C.R. 565 @ para. 50

proceed. Of course when the transaction closes, the bundle of ownership rights including privilege that belong to the target corporation passes to the new owners. In this case Med-Eng became AVTI and ultimately was amalgamated with Allen-Vanguard itself. Allen-Vanguard thus inherits Med-Eng's claims to privilege but in this case any pre-closing privileges enjoyed by Med-Eng cannot be exclusive.

[55] It is particularly questionable whether any Med-Eng privileges can be asserted against the offeree shareholders in the context of this litigation. There is a difference between confidentiality and privilege. It is one thing to preserve the confidential character of information when it is shared with other parties. It is quite another to argue that that information is privileged against the party that was made privy to that information in subsequent litigation. All of the documents and information provided by Med-Eng to Allen-Vanguard or to third parties at the request of Allen-Vanguard was information to which Med-Eng management and the offeree shareholders would have had access in the course of the negotiations.[25] Indeed the right of the offeree shareholders to have access to confidential documents supplied to Allen-Vanguard continues to exist after closing. That right is preserved in the agreement of purchase and sale.[26]

[56] I therefore agree with the submission that the offeree shareholders, Med-Eng and Med-Eng management would have had common interest privilege prior to the closing. Med-Eng privileges up to the date of closing cannot be asserted against the offeree shareholders in the context of this litigation.[27] I am not suggesting that Allen-Vanguard does not have its own claims for privilege apart from privilege inherited from Med-Eng. The point however is that the question of whose privilege is involved in different pieces of communication is potentially complicated. This also militates against overly broad privilege claims.

Communications involving Elisabeth Preston

[57] Quite apart from the due diligence, Allen-Vanguard cannot assert blanket claims of privilege over all communication to or from Elisabeth Preston or other legal advisors. Ms. Preston was a partner at Lang, Michener and was transactional counsel for Allen-Vanguard but she also played the role of in-house counsel. She formally assumed the role of Chief Legal Officer after closing and was then part of the senior management of Med-Eng and later Allen-Vanguard.[28]

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[25] Besides having nominees on the Board, in the context of the transaction, the offeree shareholders through their counsel had access to the same information as the corporation and Med-Eng management.
[26] for example paragraph 6.02 (1) which preserves a right of access to certain documents by the offeree shareholders after closing.
[27] See Sopinka, Lederman & Bryant, supra @ para 14.50, p. 928 and cases referred to
[28] I believe Ms. Preston continues in this role while also being a partner at McMillan LLP.

[58] As either general counsel or as part of the senior management team, Ms. Preston would have received requests for legal advice and would have dispensed legal advice which would be subject to privilege. She would also have received information that was not privileged and may have given advice that was not legal advice. Certainly she would have been in receipt of information that was not information for the purpose of giving specific legal advice. It is not enough that her role in management was because of her legal expertise or that she would only be involved if there was a legal dimension to the decision. It has been held for example that general legal information collected in the office of counsel or made available by counsel for the general legal education of an organization is not privileged.[29] It will not do to simply isolate any documents bearing Ms. Preston's name and to assert that they are privileged.

[59] The same may be true of other legal advisors who played multiple roles. Allen-Vanguard has identified numerous law firms and lawyers who they say provided relevant and important advice relating to the transaction generally or due diligence in particular. These claims will have to be explored with greater particularity having regard to my ruling on due diligence. A balance will have to be struck between the nature and purpose of the claim for privilege on the one hand and on the other, the need to elucidate whether or not anything communicated by the former managers could have misled Allen-Vanguard.

[60] With those general observations, I can turn to the specific items in dispute.

The inadvertently disclosed documents

[61] Certain disputed documents are already in the hands of the offeree shareholders. All of these are currently in Schedule A of the Allen-Vanguard affidavit of documents but they are documents over which Allen-Vanguard now seeks to assert privilege. The court must first determine if the documents are privileged, then determine if the privilege has been waived. If they are and remain privileged then it would be necessary to formulate appropriate relief. The relief requested is the return of the privileged documents and amendment of Schedule A to the affidavit of documents.

[62] I will deal with each of the listed documents in turn.

The KPMG Report – AVC00023109

[63] The first and most significant of the documents is the "draft" KPMG report. This document was produced for inspection. It is entitled "Project Superman Due Diligence Assistance, Draft, September 7, 2007" and was prepared for the CFO of Allen-Vanguard Corporation to "assist Allen-Vanguard ... in performing due

[29] See *Toronto-Dominion Bank v. Leigh Instruments Ltd.* (1997) 33 O.R. (3d) 575 (Gen.Div.)

diligence" in connection with the proposed investment. The document appears in Schedule A of both parties so it was in the hands of the offeree shareholders before the litigation commenced. It turns out that its provenance is problematic. Allen-Vanguard takes the view that it is in reality a privileged document and now wishes it returned.

[64] Apparently during the negotiations leading up to the share purchase, there was a meeting at the offices of McCarthy Tetrault in Ottawa. The KPMG report was seemingly left behind by someone on the Allen-Vanguard negotiating team and was collected along with other papers by McCarthy Tetrault staff. It then remained in the possession of Mr. Chapman who was counsel for the offeree shareholders until his file was obtained for the purpose of preparing for this litigation. There is no evidence that Mr. Chapman was even aware he had it or that his clients ever had access to it during the negotiation.

[65] I need not deal with whether or not the report was a privileged document in the context of the negotiations that were ongoing at that time. I am satisfied that at the very least it was confidential and that it was left behind inadvertently. I accept that if it is a document to which privilege then attached, leaving it behind after a meeting would not in and of itself be a waiver of privilege though there are circumstances in which inadvertent disclosure can lead to loss of privilege.[30]. I need not determine if those factors lead to loss of privilege in this case because in my view the document is not a privileged document at this time in the context of this litigation.

[66] The report sets out the procedures KPMG was retained to perform and the results of those procedures. It is a document that was available to Allen-Vanguard and was one of the documents used by Allen-Vanguard in deciding whether or not to purchase Med-Eng and in assessing a fair price. Though it is marked as a "draft" it was quite clearly part of Allen-Vanguard's due diligence process. I have already expressed my general view that due diligence is not covered by solicitor client privilege. Inspection of the KPMG report reinforces my opinion that this is not a privileged document. There is a covering letter directed to Rob Ryan, Chief Financial Officer of Allen-Vanguard which clearly sets out that the sole purpose of the report is "to assist [Allen-Vanguard] in its evaluation of the Target". On its face the document was intended to assist Allen-Vanguard in determining whether or not to proceed with the transaction and whether or not the price was fair. That is business and investment advice and it is not privileged.

[67] Accordingly the offeree shareholders need not return the report. It is not privileged and it properly remains part of the Schedule A documents.

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[30] See *Dublin v. Montessori Jewish Day School of Toronto* (2007) 85 O.R. (3d) 511 (S.C.J.) @ paras. 66 – 68. See also *Spiral Aviation Training Co. v. Canada* (2009)

Document AVC00026667

[68] This is the only other document that was produced for inspection. It is an e-mail from Elisabeth Preston to Chris Waitman copied to Andrew Munro & John Milne and dated July 29th, 2008. It deals with "clearing milestones". It has already been partially redacted. Since the e-mail seems to deal not with legal advice but whether or not certain steps had been completed to fulfil an agreement, I see nothing in the copy that was produced that reveals privileged information.

[69] Inspecting this document reveals the futility of examining individual documents out of context. It is impossible to determine from looking at the document itself why it is relevant or what aspect of it would be privileged. I presume it is relevant because it is part of the narrative of the eventual breakdown of a relationship with General Dynamics Armaments and Technical Products (GDATP). It is dated many months after closing.

[70] In any event I am not satisfied that privileged information is disclosed in the document and it will remain in the productions in the form that has been produced.

Draft Statement of Claim – Document OS0000345

[71] A draft pleading was sent by e-mail from Mr. Luxton to Paul Echenberg of Shroeders[31] for the specific purpose of settlement discussions. The e-mail expresses that the pleading is a draft of a claim, that it is for settlement purposes and that it is delivered on condition it will be returned if there is no settlement. Nothing could be clearer. The draft pleading was prepared for the purpose of discussing settlement and the communication is protected by settlement discussion privilege. It is in my view improper to use it in the litigation. The settlement proposal was with a view to avoiding exactly the litigation the parties are now involved in.

[72] To be honest I do not understand why this document is an issue at all. No one has explained why it is relevant or what probative value it could possibly have. One might speculate that a draft pleading containing a different version of events or a different calculation of damages could raise suspicions about the accuracy of what was ultimately pleaded in the real statement of claim but it is not a sworn document and would be of limited utility.

[73] In my view, based on the description of the document AVC00026319 is also subject to settlement privilege.

Document AVC00014475 and attachments

[31] Various Schroeder entities ad buyout funds were offeree shareholders

[74] According to the affidavit of Stephanie Cousins, this is an e-mail exchange between Elisabeth Preston and U.S. counsel in the context of seeking legal advice in relation to an "assist audit" which was then taking place. The assist audit is relevant in the litigation because it commenced prior to closing and one of the specific pleadings has to do with alleged failure to disclose "what this request signified or how this request amounted to a significant contingent liability of MES".

[75] It is also pleaded that the former managers had retained U.S. legal counsel and a U.S. consulting firm to advise them on how to avoid possible liability under the Federal Acquisition Regulations. The managers are accused of concealing this information and failing to disclose how serious the potential exposure would be. This allegation is disputed. The offeree shareholders state that Med-Eng advised of the audit and responded as required under the U.S. legislation. I would imagine that to prove that allegation there will have to be evidence about the effect of U.S. legislation provided by an American legal expert.

[76] The communication for the purpose of obtaining legal advice in 2008 is *prima facie* subject to client lawyer privilege. While the seriousness of the assist audit and whether or not the Med-Eng response to the audit in 2007 is in issue, the legal advice obtained in 2008 has not been specifically brought into play. But it may happen.

[77] Accordingly I do not rule out the possibility that the advice of U.S. counsel will subsequently be brought into issue. Failure to mitigate is an issue and presumably there will have to be evidence about the ultimate outcome of the audit, whether it in fact resulted in liability to AVTI and whether anything Med-Eng did prior to closing or Allen-Vanguard or AVTI did after closing could have changed the outcome. I was not however directed to anything in the evidence that indicates waiver of this privilege at this point in time.

[78] The issue may be revisited in future. For the moment I uphold the privilege though I suggest that Allen-Vanguard consider carefully whether it is wise to assert it. By doing so they will have to undertake not to call American counsel as an expert at trial and by asserting privilege cannot call him or her as a fact witness either.

[79] I am not able to determine from the evidence before me whether the attachments are also subject to privilege. This will depend on whether or not they are documents prepared for the purpose of obtaining legal advice or are relevant documents that exist independently which were sent to counsel to obtain that advice. In that case the original of the attachments would not itself be privileged and must be produced.

[80] I will inspect the attachments and provide further direction unless of course that general direction is sufficient. Mr. Lederman is to provide me with a copy of the document and the attachments for further review.

Documents AVC00047336 & AVC00027074

[81] These documents are partially redacted e-mail chains. Apparently there are inadvertently unredacted portions which contain legal advice given by Ms. Preston. If that is the case then those portions containing legal advice are protected by solicitor client privilege.

[82] At this point in time it does not appear there is a waiver of privilege over advice given to Mr. Timmis or advice given to Allen-Vanguard concerning the dispute with GDATP. Of course that dispute itself may be relevant because it is one of the things that went wrong and it is pleaded as one of the misrepresentations. Again careful thought will be required as to whether any of this information will be required at trial.

[83] As with the documents above, this advice may subsequently become relevant and subject to a deemed waiver of privilege. For the moment however I uphold the privilege.

Document AVC00039574 & AVD00039575

[84] This is said to be a document sent by Rob Ryan, the former CFO of Allen-Vanguard to assemble information for the purpose of this claim. If that is accurate then it is a document collecting information with the predominant purpose of litigation. It may be protected by litigation privilege.

[85] Attached to this document is document AVC00039575. This is described as a financial analysis. It is not clear whether or not the financial analysis was itself prepared for the use of counsel or to instruct counsel in the litigation. If the financial analysis was itself prepared for any other purpose then it would not be privileged. Ms. Cousins affidavit states that the analysis is specifically "directed at the litigation". She also deposes that Rob Ryan was specifically engaged by AVC to assist it with this litigation. Providing this means that he was engaged to assist with gathering the information to be used by counsel or to instruct counsel, this type of communication would be covered by litigation privilege. It is not enough for employees to have discussions in contemplation of litigation unless they are part of the chain of gathering information for the purpose of counsel conducting the litigation.

[86] It is important to remember that the purpose of litigation privilege is to permit counsel a zone of privacy in strategizing and preparing for the litigation. Accordingly it is not the evidence gathered that is privileged. It is the process of gathering the evidence, communication about the case, work product of the lawyer and information that would reveal what avenues the lawyer and client have been exploring that is within the zone of privacy. I require additional information to

confirm that the financial analysis was itself prepared for the dominant purpose of the litigation as that phrase is understood.

[87] The following table summarizes my findings.

Document Number	Description	Disposition
AVC00023109 *	KPMG Project Superman Due Diligence Assistance Draft, September 7, 2007	This document is not privileged and will remain in Schedule A
AVC00026667 *	Portion of e-mail chain said to contain communication from Canadian counsel for purpose of providing legal advice	This document is not privileged and will remain in Schedule A
OS0000345	Draft Statement of Claim provided by AVC for discussion of potential settlement	This document is covered by settlement discussion privilege
AVC00026319	Oct., 2008 e-mail exchange between David Luxton, AVC and Genuity Capital Markets in respect of potential settlement between the parties to be facilitated by Genuity	This document is covered by settlement discussion privilege
AVC00014475	Sept 19,2008 e-mail between individuals at AVC and Canadian and U.S. counsel concerning an "Assist Audit" in the U.S.	This document is privileged
AVC00014517	Attachment to AVC0014475 "Assist Audit Response & Actions"	This document is privileged
AVC00014476, AVC00014477, AVC00014479 AVC00014507	Additional attachments to AVC00014475	I will inspect these documents to determine if they are privileged.
AVC00047336	Sept 18, 2007, e-mail chain including e-mail from Paul Timmis, V.P. Med-Eng to Canadian counsel requesting legal advice. AVC wishes to redact that portion of the	The legal advice is privileged.

	e-mail chain	
AVC00027074	AVC wishes to redact additional portions of an already redacted document. Said to be in furtherance of legal advice concerning a dispute with GDATP	The legal advice is privileged.
AVC00039574 AVC00039578	August 8, 2008 e-mail from Rob Ryan, CFO, AVC seeking information for this claim and attaching a financial analysis	The document is privileged. The financial analysis may be privileged. Further evidence is to be provided about the provenance and purpose of this document.
* These two documents were produced (sealed) as part of the motion materials		

[88] With respect to the documents over which privilege has been upheld, there arises the question of remedy. I am prepared to order those documents returned to Allen-Vanguard and to deem them struck from Schedule A or in the case of the semi redacted documents, to permit them to be substituted with more fully redacted ones. This is a discretionary remedy. I will order it on terms and the term is that there be no further suggestion that counsel has behaved improperly in not returning the documents nor that having seen the documents there arises a conflict of interest that would require counsel be removed. Otherwise I would be inclined to the view that ordering the documents returned at this stage in the litigation would be unfair with the consequence that the privilege should be deemed to have been lost.[32]

[89] I am satisfied that in the context of the large volume of documents the release of these few documents that are in fact privileged was inadvertent. It was however a considerable time later that the claim of privilege was reasserted. I am satisfied on the evidence that when this was raised, counsel for the offeree shareholders then appropriately segregated the documents to await the outcome of the motion. I do not accept that the claims of privilege were so self evident that it was improper for counsel for the offeree shareholders not to have realized it immediately.

[90] There should be no suggestion of a sanction against the offeree shareholders for receiving the privileged documents and notwithstanding the importance to be

[32] *Spiral Aviation Training Co. v. Canada*, *supra* @ para. 9

ascribed to privilege generally I am also of the view that any prejudice to Allen-Vanguard is *de minimus.* This is precisely the opposite of the finding in *Nova Growth Corp. v. Kepinski.*[33]

The remaining documents.

[91] This brings me to the balance of the Schedule B documents. Counsel for the offeree shareholders has attempted to group the documents into categories and has done a great deal of work to do so. It is nevertheless a fruitless task for me to try to rule on the documents by simply reviewing the descriptions or the categories. As an example all of the due diligence documents are shown as subject to solicitor client privilege. I have determined that is not proper but there may still be documents over which privilege is proper and which should be legitimately protected.

[92] Were I to take a traditional approach to this problem it would be open to me to order all of the documents produced if I was not satisfied that Allen-Vanguard had met the onus of proving privilege.[34] This however would impose on the offeree shareholders the burden of reviewing 6,000 documents and though they are willing to do so I do not consider that an appropriate response.

[93] I could inspect all of the documents. I have already indicated my view of that idea. The court should not be called upon to review thousands of documents. I could adopt an audit approach however and inspect only selected documents from each category. Perhaps I could permit each party to select a certain number of documents for inspection. The problem with that idea is that the party opposing the privilege does not usually get to see the documents and then must make submissions guessing what is in them. While this approach has merit it lacks a certain transparency that I think is important to ensure that both parties see that justice is dispensed fairly. I invite the parties to consider how sampling and auditing might be fairly conducted and I reserve the right to impose such a solution if necessary.

[94] The parties or the court could appoint an expert to inspect and review the documents and to report. Apparently this is a solution used in some jurisdictions where discovery referees or special masters are a feature of civil litigation. This may be worth considering.

[95] What I think is necessary is for the parties to do some further work to prepare this issue for more efficient adjudication. Firstly the parties should try to reach a meeting of the minds with respect to probative value and relevance.

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[33] [2001] O.J. NO. 5993 (S.C.J. Commercial List)
[34] *Whatman v. Seley* [2000] O.J. No. 3155 (Master)

[96] Just how is Allen-Vanguard proposing to prove fraud, misrepresentation and damages? Exactly what information will the offeree shareholders require to meet that case? Clear thinking about this should render it possible to determine how much of this dispute about production is legitimately necessary and useful.

[97] The parties should then have regard to the principles discussed in these reasons and the rulings made to date. Can they agree on categories of documents that really ought to be available at trial? It is important to remember that if privilege is claimed and upheld, the evidence cannot be used by either party.

[98] Finally, once the number of documents has been reduced, the parties must consider what process can be used to filter the documents for relevance and privilege. Technological solutions should be considered as well as manual ones. Cost effectiveness, practicality and efficiency should be the touchstones. The exercise should be governed by the "3Cs" of co-operation, communication and common sense.[35] These principles of advocacy are at the very heart of effective litigation. They summarize neatly the expectations for effective discovery and production planning.

[99] I require counsel to confer regarding these matters and to reattend in person or by telephone at a case conference on a date to be set by the registrar in February of 2012. Counsel are reminded that at their request the trial date has been set for the fall of 2013 and they will be expected to develop a schedule to meet that date.

[100] I may be spoken to regarding the form of an order and as to costs should either be necessary.

Master C. MacLeod

Date: December 23, 2011

[35] *Re Bell Canada* [2003] O.J. No. 4738 (S.C.J. Commercial List) and See paragraph 5, Commercial List Practice Direction, Toronto Region.

CITATION: Lucas et al v. 1858793 Ontario Inc. o/a Howard Park et al., 2020 ONSC 964
COURT FILE NO.: CV-19-616491
DATE: 2020-01-02

SUPERIOR COURT OF JUSTICE - ONTARIO

RE: ALEXANDRE ALBERTO SILVA LUCAS and KELLY RAMOS AVELAR LUCAS, Applicants

AND:

1858793 ONTARIO INC. o/a HOWARD PARK, ANDRE RIBEIRO and SOFIA RIBEIRO, Respondents

BEFORE: Schabas J.

COUNSEL: Leon J. Melconian, Counsel for the Applicants

William Ribeiro, Counsel for the Respondent 1858793 Ontario Inc.

Andreas G. Seibert, Counsel for the Respondents Andrea and Sofia Ribeiro

HEARD: November 28, 2019

REASONS FOR JUDGMENT

Introduction

[1] This is an application by the applicants, Alexandre and Kelly Lucas ("Alex" and "Kelly" or, collectively, the "Lucases"), for relief from forfeiture and specific performance relating to their purchase of a new condominium, Unit 421(the "Unit" or "Unit 421") at 38 Howard Park Avenue in Toronto. After having made all the required deposits over the previous four years, and having paid monthly occupancy fees for almost a year, when it came time to close the agreement of purchase and sale in February 2019, the respondent 1858793 Ontario Inc. ("185") purported to terminate the contract on the grounds that the Lucases had breached the agreement by leasing the Unit from May to September 2018 to an individual without 185's consent. 185 took the position that the Lucas's deposits and occupancy fees totalling $93,534.70, were forfeited to 185 as liquidated damages. It then purported to resell the Unit to related parties, but the applicants placed a Caution on title which has prevented the sale from closing. The Unit has been leased since May 2019 with 185's consent.

[2] The respondent 185 has brought a cross-motion to have the Caution deleted, and it seeks a declaration that the applicants have no interest in the Unit.

[3] For the reasons that follow, I allow the application and dismiss the respondent's motion. I direct specific performance of the agreement of purchase and sale. Deposit funds purportedly

forfeited shall be credited towards the purchase by the applicants, and the purchase shall close on or before January 31, 2020, unless otherwise agreed. Further, I find the purported resale of the Unit to the respondents Sofia and Andre Ribeiro ("Sofia" and "Andre") by 185 is null and void. The current lease of the Unit shall be assigned to the applicants on closing and all further rent payments by the current tenants of the Unit shall be paid to them.

Background Facts

[4] On January 11, 2015, Alex and Kelly entered into an agreement of purchase and sale (the "Agreement") with 185 to purchase a condominium unit in a building to be constructed at 38 Howard Park Avenue in Toronto. The purchase price was $369,000.00. Although the Agreement was to purchase Unit 422, this was changed to Unit 421 and the deposit structure was also amended to allow a $15,000 cash back credit to the applicants on closing.

[5] From January 30, 2015 until April 19, 2018, Alex and Kelly paid all required deposits totalling $74,547.61.

[6] The owners and directors of 185 are two brothers, Mario and Francisco Ribeiro ("Mario" and "Francisco"). Mario and Francisco are also owners and directors of Triumph Roofing and Sheet Metal Inc. ("Triumph"). At the time that the Agreement was signed, in 2015, Alex was the manager of Triumph's roofing division where he had worked for several years. Alex and Kelly were on good terms with Mario and Francisco, having travelled with them and their spouses on vacations.

[7] Mario introduced the opportunity for Alex and Kelly to purchase a unit in the development at 38 Howard Park Ave on what he described as "advantageous terms" due to Alex's long-standing relationship as an employee of Triumph. These included the $15,000 credit, some of which was used to pay for upgrades chosen by the applicants, and permitting the Lucases to stretch out their deposit payments while construction was continuing.

[8] However, Alex left Triumph in January 2017 to join a competitor, Maxim Roofing Limited ("Maxim"), of which he subsequently became a 50% owner. The relationship between Alex and the Ribeiros then deteriorated, including disputes over whether Alex had enticed Triumph employees to join Maxim.

[9] On April 5, 2018, 185 advised the Lucases that the closing date for occupancy was to be April 20, 2018. Interim occupancy documentation was signed by them on April 19, following which they took possession of the Unit, although the sale would not close for several more months while deficiencies were addressed by 185 and the condominium was registered on title. During this interim occupancy period the Lucases paid $1,548.03 per month to 185 as an occupancy fee.

[10] However, the Lucases did not move in right away. Instead, on May 1, 2018, they allowed Renato Duarte ("Duarte"), a former employee of Triumph who had joined Maxim in March 2017, to live in the Unit "for a few months…until he got back on his feet", as he needed a place to stay and was in financial difficulty. Alex and Kelly's evidence is that they allowed

Duarte to stay in the Unit rent-free and that they did not receive any money from him. There is no evidence to the contrary from the respondents.

[11] 185 and Mario were aware that someone was moving into the Unit on May 1 as the elevator had to be booked in advance to facilitate the move. Although Mario said he did not know it was Duarte until July, 2018, given his relationship with Alex, he likely knew that it was not Kelly and Alex who moved in on May 1.

[12] Further, on May 3, 2018, Kelly emailed Lina Triana ("Triana") at Triumph (whose employees were also working for 185), asking which parking place their "tenant" could use. On May 31, 2018, Triana wrote to Alex and Kelly asking if "the tenants" could move things to facilitate some installations. On June 21, Kelly wrote to Ross Eskandari ("Eskandari"), an employee of 185 (but has a Triumph email address), who was dealing with concerns of occupants, about the fact that "the tenant" could not access the locker. Much is made by the respondents of the use of the word "tenant" by Kelly as suggesting that Duarte was in fact paying rent. Further, insurance documents produced by Alex and Kelly for renewal in 2019, having been in place since April 2018, state that the Unit is rented and occupied by a third party. Nevertheless, there is no evidence that any rent was received,or of any rental agreement.

[13] Through the course of the summer of 2018, 185 was addressing deficiencies in the Lucas's Unit and throughout the building. Further, 185 was in touch with Kelly as the August cheque for occupancy fees had been returned "NSF", and Kelly quickly rectified it, including paying a significant penalty. On September 21, 2018, however, Vanessa Spagnuolo ("Spagnuolo"), at Triumph but writing on behalf of 185, sent Kelly a list of deficiencies and complained that some could not be addressed because Duarte had denied access to the Unit. Spagnuolo then went on to bring to Kelly's attention section 18 of the Agreement, which prohibited leasing the Unit without 185's written consent. Spagnuolo requested that Kelly sign off on the list of deficiencies, following which she could request approval to lease the unit. Until then, Spagnuolo said, 185 took the position that the Lucases were in breach of the Agreement.

[14] Kelly wrote back the same day, September 21, advising that Duarte was not leasing the Unit, there was no rental agreement with him, and they had received no compensation from him. On October 1, Duarte vacated the Unit, albeit involuntarily, as he was arrested following a search of the Unit by police and did not return. Mario has asserted in this proceeding that Duarte caused trouble while living there, but Alex has stated he was unaware of any complaints. In a text to Duarte's girlfriend in November, Alex complained that not only did they live there rent-free but left the Unit in a mess.

[15] No further mention was made of the alleged breach of the Agreement in October and November 2018, while deficiencies continued to be addressed. 185 continued to cash the Lucas's post-dated cheques for monthly occupancy fees, and Kelly and Alex granted access to the Unit so that contractors could make repairs. The Unit was unoccupied after Duarte left.

[16] However, a dispute developed over one repair. A gouge in the bathtub had been identified in August 2018 and 185 had, at that time, accepted responsibility for it. An inspection of the Unit by Tarion, the home warranty organization, in November confirmed that the

deficiency had not been repaired. However, on December 6, 2018, 185 had changed its position, asserting that it had repaired the gouge, but did so as a "courtesy", and said that if the repair was not acceptable and "we are directed to replace the tub by Tarion…[a]ll costs involved with your unit and breach of the occupancy agreement with regards to leasing will be tabulated on closing."

[17] After further emails with Kelly and Alex about the tub, what was a somewhat veiled threat of seeking damages became more explicit in an email from Spagnuolo to the Lucases on December 19. It stated that if the Lucases cleared all deficiencies, including the bathtub, 185 would "not pursue your breach of the occupancy agreement any further." On January 6, 2019, Mario repeated this ultimatum to Alex in a telephone conversation, even though Tarion had confirmed on January 2 that it was 185's responsibility to replace the bathtub.

[18] The Lucases held firm, insisting on the bathtub being replaced, and 185 repeated its ultimatum in an email from Spagnuolo on January 11, purporting to give the Lucases five days to accept 185's "final offer". However, on January 22, 185 appeared to capitulate and advised Kelly and Alex that the bathtub would be replaced "in protest" on January 28, and that all costs related to damage to the Unit caused by Duarte "will be tracked and kept in claim of your breach of occupancy agreement." Spagnuolo said she would keep them updated on the installation of the new tub. The bathtub was in fact replaced.

[19] However, instead of proceeding to close the sale (the condominium declaration was registered on title on February 21, 2019, which allowed closings to follow), on February 5, 2019, 185 purported to terminate the Agreement on the basis of Duarte's occupancy from May 1 to October 1, 2018. 185 wrote to Alex and Kelly, stating, among other things:

> We have learned that you leased the unit to a third party tenant which is a fundamental breach of the Agreement of Purchase and Sale entitling us to terminate your Agreement.
>
> We hereby terminate your Agreement of Purchase and Sale and have had your deposits and occupancy fees forfeited to us as liquidated damages.

[20] Although the letter implies that 185 had recently "learned" of the lease, the evidence is clear that 185 was aware of Duarte's occupancy of the Unit when he moved in on May 1, 2018, and that he left on October 1,2018, over four months before the termination letter. When asked in cross-examination why he didn't terminate the Agreement earlier, Mario stated: "So, I was weighing you know, our options, and very busy. … there was a lot of stuff going on." Mario could not recall what the other options were.

[21] At the time the Agreement was terminated, the total of the deposits paid to 185 by the applicants was $74,547.61. Monthly occupancy fees and expenses paid through to February 2019 totaled $18,987.09. Therefore, pursuant to the February 5 termination letter, and in reliance on section 27 of the Agreement, 185 asserted that the Lucases forfeited $93,534.70 to 185 as "liquidated damages" for the alleged breach. Had the Agreement not been terminated, to close it the applicants would have paid about $280,000.00.

[22] A little over a month after purporting to terminate the Agreement, on March 12, 2019, 185 entered into an agreement of purchase and sale of Unit 421 with two of Francisco's children (and the niece and nephew of Mario), Sofia and Andre, for a purchase price of $418,000.00. This agreement provided that Sofia and Andre only paid a $5,000 deposit, which was effected through bank drafts of $2,500 from each of them, although Andre said Sofia paid the full deposit. The agreement also provided that Andre and Sofia would only pay an additional $13,000 on closing, which was to occur on an undetermined date within six months. The balance of the purchase price of $400,000 was to be loaned to Sofia and Andre by 185, secured by a promissory note, not a mortgage.

[23] The agreement between 185 and Sofia and Andre provided for an occupancy date of March 29, and 185 provided permission for it to be leased. As a result, the Unit has been occupied by tenants since May 23, 2019, who are paying a monthly rent of $2,250 to Sofia, who is described as the landlord.

[24] The sale to Andre and Sofia has not closed. On March 19, 2019, Alex and Kelly commenced this application, and on April 1 they registered a Caution on title to the Unit which has prevented the sale.

[25] The value of Unit 421 has increased significantly since 2015. Valuations of the property obtained in April 2019 estimated a value of between $490,000 to $520,00, or about 40% more than the purchase price in the Agreement of $369,000. As of April 2019, units in the building were selling for approximately $1,000 per square foot. Unit 421 is 595 square feet in size.

Issues

[26] The following issues arise for determination:

(a) Was there a breach of the Agreement by the applicants?

(b) If there was a breach, was the breach a fundamental breach that entitled the respondents to terminate the Agreement in February, 2019?

(c) If there was a breach, was the breached waived by the respondents? and

(d) Are the applicants entitled to the relief sought, in particular, relief from forfeiture and specific performance?

Analysis

1. Did the applicants breach the Agreement?

[27] Section 18 of the Agreement prohibits a "lease" or "offer to lease" without consent. It states:

> (a) The Purchaser covenants and agrees with the Vendor not to list for sale, advertise for sale, offer for lease, offer for sale, sell, lease, transfer or assign his

interest under this Agreement or in the Unit, at any time prior to the Unit Transfer Date without first: (i) obtaining the written consent of the Vendor, which consent will not be unreasonably withheld once the Vendor determines that ninety (90%) percent of the units in the Condominium are sold, which determination shall be made by the Vendor in its sole and unfettered discretion; (ii) acknowledging in writing that the Purchaser shall remain fully responsible for the Purchaser's covenants, agreements and obligations contained in this Agreement; (iii) obtaining an assignment and assumption agreement from the transferee/assignee in a form acceptable to the Vendor acting reasonably; (iv) remitting payment of the sum of five thousand dollars ($5,000,00) (plus applicable taxes) to the vendor by certified cheque representing an administrative fee payable to the Vendor for processing and for allowing such transfer or assignment together with a fee of one thousand dollars to the vendor's solicitor plus taxes; (v) and provided that the listing of such sale, transfer or assignment is not and never was listingd on the Toronto Real Estate Board, Multiple Listing Service ("MLS"); and (vi) obtaining the written consent or approval from any lending institution or mortgagee providing any financing to the Vendor, construction or otherwise, for the development and construction of the Condominium, in the even[t] such consent or approval is required to be obtained by the Vendor as a condition for the advance or continued advance of any funds in respect of such financing. The Purchaser acknowledges and agrees that once a breach of the preceding covenant occurs such breach is or shall be incapable of rectification, and accordingly the Purchaser acknowledges and agrees that in the event of such breach the Vendor shall have the unilateral right and option of terminating this Agreement and the Occupancy Licence, effective upon delivery of notice of termination to the Purchaser or the Purchaser's solicitor, whereupon the provisions of this Agreement dealing with the consequence of termination by reason of the Purchaser's solicitor, whereupon the provisions of this Agreement dealing with the consequence of termination by reason of the Purchaser's default, shall apply. Subject to the foregoing, the Purchaser shall be entitled to direct that title to the Unit to be taken in the name of an assignee.

(b) The Purchaser acknowledges and agrees that once a breach of the preceding covenant occurs, such breach is or shall be incapable of rectification, and accordingly the Purchaser acknowledges and agrees that in the event of such breach the Vendor shall have the unilateral right and option of terminating this Agreement effective upon delivery of notice of termination to the Purchaser or the Purchaser's solicitor, whereupon the provisions of this Agreement dealing with the consequence of termination by reason of the Purchaser's default, shall apply. [emphasis added]

[28] The intent of the clause prohibiting leases without consent is, in part, to ensure that during the occupancy period deficiencies can be addressed without difficulties in gaining access to units and to avoid disputes over damage caused by third parties. To do so, however, 185 chose in the Agreement to prohibit "leasing" of units without consent. "Lease" is not defined in the Agreement or the *Condominium Act, 1998*, c. C.19, but its common definition is that a lease is a written contract, for a fixed period, permitting use of an asset.

[29] 185 points out that the definition of "tenant" in the *Residential Tenancies Act, 2006*, S.O. 2006, c. 17, s. 2(1), is broad, stating that it "includes a person who pays rent in return for the right to occupy a rental unit", but it is not limited to such circumstances. As they note, there are many forms of tenancy, such as "tenancy at will" and "tenancy at sufferance", which can arise by implication and may be terminated unilaterally.

[30] 185 also relies on section C.12 of the occupancy licence attached as Schedule "C" to the Agreement. This states that "the Purchaser shall not have the right to assign, sublet or in any other manner dispose of the Occupancy Licence during the interim occupancy without the prior written consent of the Vendor which consent may be arbitrarily withheld." In my view, this does not assist the respondent, as the Unit was not assigned, sublet or disposed of by the applicants.

[31] In my view, the Agreement does not prevent owners, or the purchasers who became entitled to occupy the units pending closing of sale, from allowing friends or guests, and those who they may describe as "tenants", from staying in their units. It prohibits leases, and the occupation of the Unit by Duarte was not subject to any lease agreement, nor did the Lucases receive rent or other benefits from Duarte. The respondents have led no evidence to the contrary. Although the insurance documents describe the property as rented, and Kelly referred to Duarte as the "tenant", in light of the explanations of the applicants and contemporaneous records confirming that Duarte was simply being loaned the Unit for a short period of time, I find there was no lease and therefore no breach of section 18 of the Agreement.

[32] In coming to this conclusion, I have also considered whether there was, in fact, the required consent by 185 to Duarte's occupancy, given the admitted knowledge of 185, and Mario, that Duarte was occupying the Unit and was being referred to as a "tenant" by 185. However, I prefer to deal with these facts in addressing other issues, such as the failure to act promptly in asserting a breach, and waiver.

2. If there was a breach, was it a fundamental breach, and does it justify termination in February 2019?

[33] The applicants submit, in the alternative, that if there was a breach, it was not a fundamental breach which would entitle 185 to terminate the Agreement. Relying on the Court of Appeal's decision in *Spirent Communications of Ottawa Ltd. v. Quake Technologies (Canada) Inc.* (2008), 88 O.R. (3d) 721 (C.A.) at paras. 35-36, the applicants submit that the breach is minor and cannot be said to have "deprive[d] the innocent party of substantially the whole benefit of the contract." They submit, with some force, that a consideration of the five factors relevant to fundamental breach favour the applicants: (1) the applicants have otherwise performed their obligations by paying significant deposits; (2) the breach was not serious, as demonstrated by the failure of 185 to object to Duarte's presence until just a few days before he left; (3), there is no likelihood of repetition; (4) there were very limited consequences from the breach; and (5) at the time of termination, the sale was ready to close, fulfilling all obligations under the Agreement.

[34] I agree that based on the five factors discussed in *Spirent* there has not been a fundamental breach. 185 cannot be said to have been deprived of "substantially the whole

benefit of the contract" having regard to the limited period of occupancy by Duarte and the very limited impact it may have had on the completion of the sale of the Unit.

[35] However, section 18 of the Agreement states that the breach is "incapable of rectification", and *Spirent* did not deal with a contract with such a clause. Absent ambiguity, or evidence of some inequality of bargaining power or other factors that would cause a court to intervene, the terms of a contract are binding. Here, the parties entered into the Agreement with knowledge of its terms. Section 18 is unambiguous and there is no argument that Kelly and Alex were unaware of it or did not consent to it when signing the Agreement. Indeed, Kelly was apparently well aware of section 18 as she stated in her prompt response to 185 on September 21, 2018, when the legality of Duarte's occupation of the Unit was first raised.

[36] The restriction on rectification in section 18 is a condition which allows the vendor to treat the contract at an end if there is a breach. In this sense, as when there is a fundamental breach, 185 was entitled to treat the Agreement at an end if in fact the applicants leased the Unit.

[37] The problem, however, is that 185 did not treat it at an end; to the contrary, it did not treat the breach as "fundamental" or as "incapable of rectification" at all. 185 had knowledge of Duarte's occupancy from the outset, in May, 2018. It took no steps to investigate or require compliance with section 18 of the Agreement until it raised the issue in September, 2018, in the context of an emerging dispute between the Lucases and 185 about deficiencies. Spagnuolos's September 21 email did not terminate the Agreement, but suggested the breach could be cured by signing off on deficiencies.

[38] 185 did not respond to Kelly's denial of a breach on September 21, 2018, and did not raise the issue again until December, long after the breach, if any, had been cured. Throughout this time, 185 continued to cash the applicants' cheques paying the monthly occupancy fee.

[39] Only on December 19, 2018, was the alleged breach raised again, as a bargaining chip over the bathtub repair – a repair 185 was obliged to make. The applicants objected to 185's demands, and 185 continued to treat the contract as extant and continued to take the applicants' monthly occupancy fees. 185's demand was repeated on January 11, 2019, though it never said the contract would be terminated if the Lucases did not agree to 185 not repairing the bathtub. 185's email of January 22 was even more tactical, saying that the tub would be repaired "in protest". The full email is as follows:

> This email is to confirm that we will proceed with the bathtub replacement in protest. All costs related to your unit associated with damage caused by your tenant will be tracked and kept in claim of your breach of occupancy agreement. Diogo and Ivette will be responsible for coordinating the installation of the new tub. They will be able to provide you with progress updates.

[40] This is not an email threatening termination, nor does 185 take the position that the alleged breach, which had been cured months earlier, was "incapable of rectification." To the contrary, it treats the contract as continuing to be in force and only suggests, vaguely, that there may be some kind of damage claim.

[41] Yet on February 5, 2019, just weeks before closing, and having continued to take the Lucas's monthly cheques, 185 purported to terminate the Agreement. It asserted that the applicants' deposits and monthly occupancy fees were forfeited to it as "liquidated damages" pursuant to section 27 of the Agreement, which provides:

> In the event that the Purchaser is in default with respect to any of his or her obligations contained in this Agreement or in the Occupancy License on or before the Unit Transfer Date and fails to remedy such default forthwith, if such default is a monetary default and/or pertains to the execution and delivery of documentation required to be given to the Vendor on the Closing Date, or within five (5) days of the Purchaser being so notified in writing with respect to any other non-monetary default, then the Vendor, in addition to (and without prejudice to) any other rights or remedies available to the Vendor (at law or in equity) shall, firstly charge the sum of two hundred and fifty dollars together with the vendor's legal fees for each day that the purchaser delays the payment that is required to be made and secondly in addition to the above, may unilaterally suspect the Purchaser's rights, benefits and privileges contained herein (including without limitation, the right to make colour and finish selections with respect to the Unit as hereinbefore provided or contemplated), and/or unilaterally declare this Agreement and the Occupancy Licence to be terminated and of no further force or effect, whereupon all deposit monies therefore paid, together with all monies paid for any extras or changes to the Unit, shall be retained by the Vendor as its liquidated damages, and not as a penalty, in addition to (and without prejudice to) any other rights or remedies to the Vendor… [emphasis added]

[42] In my view, by not treating the Agreement at an end and "incapable of rectification" when it knew of the breach, at latest, by September 21, 2018, 185 lost the right to terminate and claim the deposits and fees as liquidated damages. It sat on its rights, to the detriment of the applicants, who continued to pay occupancy fees and expected to close the sale in early 2019. Assuming there had been a breach between May 1 and October 1, 2018, that breach was rectified and both parties acted on that basis from October 1 forward. There was no breach in February 2019 and nothing stood in the way of closing the sale. 185 acted wrongly in terminating the Agreement.

[43] In this regard, principles relating to repudiation and anticipatory breach are informative. As the Court of Appeal has observed in *Place Concorde East Limited Partnership v. Shelter Corporation of Canada* (2006), 270 D.L.R. (4th) 181 (Ont.C.A.) at paras. 49-50, "repudiation occurs by words or conduct that show an intention not to be bound by the contract." In those circumstances, the innocent party has a choice: it can either "treat the contract as still being in full force and effect, and the contract remains for the future", or it can "elect to treat the contract at an end thereby relieving the parties from further performance." The Court continued: "As a general rule, the innocent party must make an election and communicate it to the repudiating party *within a reasonable time*: see *Chapman v. Ginter* 1968 CanLII 72 (SCC), [1968] S.C.R. 560 at 568. However, in some cases the election to treat the contract at an end will be found to have been sufficiently communicated by the innocent party's conduct: John D. McCamus, *The Law of Contracts*, (Toronto: Irwin Law Inc., 2005) at pp. 641-42." [emphasis added] See also *Maharaj v. Robinson*, 2015 ONSC 7539 at para. 15.

[44] Similarly, where the innocent party does not insist on strict compliance, and the party in breach relies on that conduct to its detriment, the innocent party loses its right to terminate on the basis of the breach. In *Samson v. Lockwood* (1998), 40 O.R. (3d) 161 (Ont.C.A.), a purchaser of property became aware of a misrepresentation by the vendor which gave rise to a right to rescind, but the purchaser indicated an intention to continue with the purchase. He could not then, several months later, rely on the misrepresentation to assert rescission when he was unable to come up with the funds to close the transaction. As Rosenberg J.A. stated, "a party who affirms a contract after becoming aware of the nature of the misrepresentation loses the right to rescind. Affirmation can be express or can be inferred from conduct". See also McCamus, *The Law of Contracts*, at p. 680

[45] In my view, assuming Kelly and Alex breached the Agreement, 185 affirmed the Agreement by its conduct of continuing to treat the contract as being in full force and effect after it knew of, and had alleged, the breach of section 18. Even if there was a fundamental breach, or a breach "incapable of rectification", 185 did not exercise its right to treat the contract at an end within a reasonable time; to the contrary, by its actions it chose to continue to treat the contract as being in effect and lost the right to terminate on that basis.

[46] Before leaving this issue I wish to address 185's submission that its communications of December 6 and 19, 2018, and January 11, 2019 (which included a draft agreement described as a "final offer"), were made "without prejudice" and were settlement discussions which should not be admissible. This submission has no merit. First, only one email, dated December 19, states it is "without prejudice". Second, these are not settlement discussions between lawyers; they are communications between the parties regarding their positions on the performance of a continuing contract, including the fulfillment of 185's obligation to repair and resolve deficiencies in the Unit. There is no basis to treat them as being inadmissible on the basis of settlement privilege.

3. Waiver

[47] I also find that the doctrine of waiver applies to the respondent 185's actions, and that it has waived its right to insist on its strict legal rights in the Agreement. As Morden A.C.J.O. put it in *Malva Enterprises Inc. v. Rosgate Holdings Ltd.* (1993), 14 O.R. (3d) 481 (Ont.C.A.) at p. 487:

> A landlord who has the right to forfeit a lease by reason of the tenant's default may waive the exercise of this right when, after the act or omission giving rise to the right of forfeiture has come to its knowledge, it does any act whereby it recognizes the relationship of landlord and tenant as still continuing: see *Prudential Insurance Co. v. McLean, supra*, at pp. 382-84, and Hill and Redman, *Law of Landlord and Tenant,* 18th ed. (1988), at pp. A952-A953. Hill and Redman state the underlying reasoning at p. A952:
>
> > The lessor has an option whether he will take advantage of a forfeiture or not, and if he elects not to do so the forfeiture is waived. This waiver of the right to forfeit the lease is properly regarded as an aspect of the wider doctrine of election. This type of waiver arises where a person is entitled

> to alternative rights which are inconsistent with one another and, with knowledge of the facts which give rise in law to these alternative rights, he acts in a manner which is consistent only with his having chosen to rely on one of them. He is held in law to his choice even though he was not aware of the legal consequences of the choice. Such election may be either express or implied and it is implied when the lessor, after the cause of forfeiture has come to his knowledge, does any act whereby he recognises the relation of landlord and tenant as still continuing. [emphasis added]

[48] The passage above also supports relief from forfeiture, which is sought by the applicants, and is addressed below.

4. Remedy

Relief from Forfeiture

[49] Section 27 of the Agreement, quoted above, provides that upon a breach of section 18 all deposits and other fees paid to 185 are forfeited and shall constitute 185's liquidated damages. In my view, the respondent 185 cannot rely on this section, and there should be relief from forfeiture for two reasons.

[50] First, assuming there has been a breach, 185's delay in exercising its rights, and what I also have found to be a waiver of its right to terminate, deprives 185 of its right to take the deposits as liquidated damages: *Malva Enterprises Inc., supra.*

[51] Second, even if there is a contractual right to forfeiture, I exercise my discretion to grant relief pursuant to s. 98 of the *Courts of Justice Act*, R.S.O. 1990, c. C.43. In *Saskatchewan River Bungalows Ltd. v. Maritime Life Assurance Co*., [1994] 2 S.C.R. 490, Major J. noted that "[t]he power to grant relief against forfeiture is an equitable remedy and is purely discretionary." In that case the Supreme Court approved the three-part test for relief from forfeiture stated by McKinlay J. (as she then was) in *Liscumb v. Provenzano* (1985), 51 O.R. (2d) 129, aff'd (1986), 55 O.R. (2d) 404 (C.A.) at p. 137: "first, was the conduct of the plaintiff reasonable in the circumstances; second, was the object of the right of forfeiture essentially to secure the payment of money, and third, was there a substantial disparity between the value of the property forfeited and the damage caused the vendor by the breach?"

[52] In my view, the test is clearly met in this case.

[53] First, the conduct of the applicants was reasonable following the assertion of the breach. Duarte left the Unit, the applicants provided access to the Unit to address deficiencies, and continued to pay their monthly occupancy fees. Months after the alleged breach they were ready and able to close the sale.

[54] Second, although the objective of the right of forfeiture arising from the prohibition on leasing without permission may have been to achieve other goals, such as ensuring access to the

Unit during the occupancy period, avoiding disputes over damage by third parties, and to ensure final payment on closing, those objectives were not involved in the decision to terminate. Rather, following the assertion of the breach in September, 2018, 185 used the assertion of the breach solely to attempt to secure an economic advantage by avoiding the cost of repairing deficiencies, in particular, the bathtub, which Tarion had found it was required to replace. And even this had been completed just prior to termination. There was no basis to terminate and exercise the forfeiture right, other than it gave 185 an opportunity to seize the deposit. This is essentially the same as securing a payment of money and in my view meets the second branch of the test for relief from forfeiture.

[55] Third, forfeiting or, perhaps more accurately, the *taking* of over $90,000 by 185, months after the alleged breach was cured and the parties had moved forward, is grossly disproportionate to the harm, if any, suffered by 185. Further, the termination and forfeiture will result in much greater loss to the applicants than the actual monetary amount as 185's actions would result in Kelly and Alex losing the opportunity to obtain ownership of a unit which has increased in value significantly since the purchase price was agreed upon in 2015. This makes the "disparity between the value of the property forfeited and the damage caused to the vendor" even larger, and 185 would be unjustly enriched by gaining the ability to sell the Unit at a higher price as it has purported to do by its agreement to sell to Sofia and Andre.

Specific Performance

[56] Historically, specific performance was automatically granted for the acquisition of real property, when requested. However, the presumption of specific performance for real estate no longer applies. As the Supreme Court stated in *Semelhago v. Paramadevan*, 1996 CanLII 209 (SCC), [1996] 2 S.C.R. 415, at paras. 20 and 22:

> While at one time the common law regarded every piece of real estate to be unique, with the progress of modern real estate development this is no longer the case. Both residential, business and industrial properties are mass produced much in the same way as other consumer products. If a deal falls through for one property, another is frequently, though not always, readily available.
>
> …
>
> Specific performance should, therefore, not be granted as a matter of course absent evidence that the property is unique to the extent that its substitute would not be readily available.

[57] Accordingly, whether specific performance for property should be granted will turn on the facts of each case and a consideration of the underlying purposes of the remedy. In *Landmark of Thornhill Ltd. v. Jacobson* (1995), 1995 CanLII 1004 (ON CA), 25 O.R. (3d) 628 (C.A.), at p. 636, the Court of Appeal identified three factors that should be considered, as follows: (1) the nature of the property; (2) the "related question of the inadequacy of damages as a remedy"; and (3) "because of the equitable nature of the remedy,…the behaviour of the parties." [emphasis added] And although these factors were articulated before the Supreme

Court's decision in *Semelhago*, the Court of Appeal has confirmed their continued application: *Matthew Brady Self Storage Corp. v. InStorage Limited Partnership*, 2014 ONCA 858 (CanLII) at para. 32, leave to appeal to S.C.C. dismissed, [2015] S.C.C.A. No. 50. See also: *Rock Developments v. Khalid Real Estate,* 2015 ONSC 5261 (CanLII) at paras. 71-72; *Sivasubramaniam v. Mohammad*, 2018 ONSC 3073 (CanLII).

[58] In my view, these factors favour the granting of specific performance.

[59] First, although Unit 421 cannot be described as "unique" as there are many similar units in the building, and no doubt across Toronto, uniqueness can be established if "its substitute would not be readily available". In that context, less may turn on subjective factors of uniqueness or specific characteristics of a unit, than on the concern that, in the Greater Toronto Area at least, obtaining a property is difficult, as real estate values have been increasing dramatically and homes are frequently subject to bidding wars. This was recognized by Charney J. in *954294 Ontario Ltd. v. Gracegreen Real Estate Development Ltd.*, 2017 ONSC 6369 (CanLII) at para. 151 as follows:

> I would observe that while the premise upon which the Supreme Court's decision in *Semelhago* was based—that "[r]esidential, business and industrial properties are all mass produced much in the same way as other consumer products"— may have been true in 1996, it does not necessarily reflect the current real estate and development market in the Greater Toronto Area. In a housing market in which land is in increasingly limited supply and home sales are often characterized by bidding wars among prospective purchasers, it is no longer accurate to assume that residential properties are "mass produced", at least within the GTA. This does not abrogate the stated principles applicable to granting specific performance, but it does suggest that the criteria will be more easily met within the present GTA housing market.

[60] In *John E. Dodge Holdings Ltd. v. 805062 Ontario Ltd.* (2003), 2003 CanLII 52131 (ON CA), 63 O.R. (3d) 304, leave to appeal to S.C.C. dismissed, [2003] S.C.C.A. No. 145, at paras. 38-39 the Court of Appeal observed that "the property in question has a quality that cannot be readily duplicated elsewhere. This quality should relate to the proposed use of the property and be a quality that makes it particularly suitable for the purpose for which it was intended." The determination of this question should be addressed as of the date when the actionable wrong took place.

[61] In this case, the respondent 185 emphasizes that the applicants do not wish to live in the Unit. The Lucas family has grown since the Agreement was signed. They now have two children and intend to sell Unit 421 in order to obtain a larger unit. I agree that in this regard, uniqueness of the property in the sense that it has some special characteristic sought by the party, does not apply.

[62] However, uniqueness must also be considered in the context of whether damages are an adequate alternative to specific performance. As Lax J. noted at the trial level in *John E. Dodge Holdings Ltd. v. 805062 Ontario Ltd,* (2001), 2001 CanLII 28012 (ON SC), 56 O.R. (3d) 341,

which was upheld by the Court of Appeal, "[t]he court will determine objectively whether the plaintiff has demonstrated that the property has characteristics that make an award of damages inadequate for that particular plaintiff."

[63] This approach is consistent with the policy reasons for the equitable relief of specific performance, which recognizes that there are circumstances where damages will be inadequate, and that specific performance provides a more complete and just remedy to the plaintiff: As The Honourable Robert J. Sharpe has stated in *Injunctions and Specific Performance* (Thomson Reuters, Looseleaf Edition), at para. 7.50:

> It has often been said that the general goal of contract remedies is so far as possible to put the plaintiff in the position he or she would have been in had the contract been performed. This goal can be achieved by two methods. The first is to award the injured party compensatory damages. The second is to order the defaulting party specifically to perform its obligation. The existing regime of remedial law strongly favours the first option of damages and awards specific performance only in exceptional cases. Yet in many cases, specific relief may seem to be the only sure way to put the plaintiff in the position he or she would have been in had the contract been performed. …The assessment of damages the innocent party has suffered can be a difficult, expensive and time-consuming task. Specific performance has the advantage of avoiding the problems and costs the parties and the judicial system must incur if damages are to be assessed. Perhaps more significant is the very real element of risk that the translation into money terms of the effect of the breach on the plaintiff may be inaccurate. Some cases will present more risk than others but it cannot be denied that the element of risk of error is virtually swept away if the court is able to make an order of specific performance. The innocent party receives the very thing bargained for rather than a monetary estimate of its worth. [emphasis added]

[64] In the circumstances of this case these values underlying specific performance are applicable. Kelly and Alex Lucas agreed to purchase the Unit on what the respondent has described as "advantageous terms" in January 2015, almost five years ago, and over four years before the purported termination. During that time the Unit has increased in value significantly, as has most real estate in the GTA. At the same time, the applicants' deposits have been provided to 185, and that money has been, and remains, tied up in the property, unavailable for acquiring another property, as the market continues to rise.

[65] Granting specific performance will better achieve justice than requiring the applicants to sue for damages. If they are required to sue for damages – which they have not sought on this application, which is itself informative – litigation may drag on for years in which the applicants will be denied the advantage of the rise in value of the Unit that exists today and their use of their deposit, which will impact to their detriment on their ability to acquire a home of the size and quality they could otherwise afford now. Put another way, their losses are difficult to mitigate, which explains why the applicants promptly sought specific performance. Obtaining, down the road, a judgment directing the return of the deposit and damages, which may also be difficult to

calculate, and may be difficult to collect from a corporation that has long since completed its reason for existence, may be a pyrrhic victory indeed.

[66] Additionally, the policy concerns that weigh against specific performance have little application here. Directing the closing of the Agreement is a straightforward remedy that should not require further intervention or supervision by the court, nor are there concerns about ongoing obligations such as would arise with an employment contract or other context with ongoing performance obligations. Further, there is the concern that if specific performance is not available here, then developers may be incentivized to terminate agreements in rising markets. While it will impact on the attempt to sell the Unit to Andre and Sofia, as I find below, that sale is null and void. It was not an arm's length transaction and was part of the misconduct by Mario and Francisco in terminating the sale to the applicants and attempting to put the Unit out of their reach.

[67] Specific performance has been awarded in similar, albeit not identical, circumstances. For example, in *Walker v. Jones*, 2008 CanLII 47725 (ON SC), Strathy J. (as he then was), treated the price and affordability of a home as important factors in his decision to find that the test for uniqueness and the related issue of inadequacy of damages had been met. He also considered the circumstances of the market and the means of the plaintiff, noting at para. 165:

> The evidence of Mr. Moore suggests that the market was rising in the period between May and the end of November and it is a reasonable conclusion that the market was still "hot" and did not begin to cool off until some time into the new year. In these circumstances, considering that the defendant had purported to forfeit the plaintiff's deposit, that the plaintiff had incurred legal expenses in the aborted transaction, together with moving expenses, rent and other costs, and considering that the holiday season was approaching, I do not think it was at all unreasonable for the plaintiff to seek specific performance rather than enter the still turbulent and rising real estate market. As well, the evidence does not establish that she could have found a reasonably comparable substitute property in her price range. [emphasis added].

[68] Strathy J. also expressed concern about damages and the timeliness of any payment of them, as well as the lack of prejudice to the defendant in requiring specific performance, at paras. 169-170, stating:

> If damages were ordered, whether based on the value of the property on the date of breach or the value of the property today, I cannot assume they would be collected in any reasonable time. Ms. Walker would be put in a position of looking for another house in a fluctuating market and with fluctuating mortgage conditions, with no assurance that she would be able to locate anything at all comparable given the features of this house. It could be more than a year before this would occur and I do not think it is either fair or reasonable to put the plaintiff and her family through that kind of delay.

> Looking at the other side of the scale, I do not think there is anything inequitable in holding the defendant to his original bargain. He will be in exactly the position that he would have been had the contract been performed on November 30th.

[69] *Walker v. Jones* was followed by Charney J. in *Sivasubramaniam v. Mohammad.* That case also dealt with residential real estate in a rising market, the impact of which was addressed at para. 92:

> On April 29, 2015, when the APS failed to close, the applicant was confronted with much the same situation as described by Strathy J. in *Walker*. The market was rising. Moreover, the respondents had purported to forfeit the applicant's deposit, making it even more difficult for the applicant to collect a down payment and bid for other properties. In these circumstances, it was reasonable for the applicant to try to negotiate a new closing date, or seek specific performance if that effort failed. As well, the evidence does establish that the applicant would not have found a reasonably comparable substitute property in his price range.

[70] Justice Charney's comments have application to this case as well, including his comments, at para. 96, about the inadequacy of damages, which identify the concern that pursuing damages will require "further expensive and prolonged litigation", noting that "[t]he transactional costs (in both time and money) associated with further litigation and obtaining a writ of seizure and sale reduces the likelihood that the plaintiff will be fully compensated by damages."

[71] Specific performance is the only remedy that provides timely access to justice to the applicants. It promptly and effectively puts the applicants in the position they would, and should, have been in if the contract had been performed.

"Clean Hands"

[72] The respondent 185 submits that the equitable relief sought – relief from forfeiture and specific performance – requires the applicants to come to the court with "clean hands", and that they do not do so here. I disagree. The conduct cited by the respondent largely repeats assertions that the applicants breached the Agreement, denied the breach when it was asserted in September, and that they did not take steps to remove Duarte who was only fortuitously removed by force when he was arrested. The alleged breach and denial are not examples of bad conduct that would deny the applicants' clean hands; otherwise, the clean hands doctrine would apply in most cases of breach of contract. In any event, the applicants did not mislead 185 in their response on September 21, 2018. As for Duarte's departure, that occurred shortly after the alleged breach was raised, and the applicants do not lose the right to equitable relief because they did not take any steps in the immediate ten days following the assertion of the breach to cure it.

[73] 185 also complains that placing the Caution on title, which included a fictional closing date of September 1, 2019 for the Sofia and Andre transaction, should also deny the applicants equitable relief, as it was in breach of section 17 of the Agreement which prohibits registering a Caution or Certificate of Pending Litigation on title. Given my findings above, the registering of

a Caution does not mean the applicants no longer have "clean hands". They were responding to an unjustified and wrongful breach of the Agreement by 185 to protect their right to seek specific performance. They were not acting in bad faith. I also find no fault in the applicants inserting a date for closing as the evidence is that they were required to specify a date in order to register the Caution. In any event, September 1 was a reasonable date as the agreement with Andre and Sofia was signed on March 12, 2019 and was to close within six months.

[74] Finally, 185 submits that an angry conversation between Alex and Ross Eskandari about the bathtub means that the applicants do not have "clean hands". Again, I disagree. Both sides agree that their former close relationship has deteriorated, and it is not surprising that emotions may at times have run high and angry words were spoken.

[75] To the extent that the "clean hands" doctrine might apply to this case, it might apply more readily to the respondents, who sat on their rights taking monthly fees from the applicants while improperly trying to use the allegation of a breach to avoid a repair they were obliged to make, and then terminated the Agreement without any justification, long after any breach had been cured.

The Caution and the Sale to Andre and Sofia

[76] I have concluded that the applicants should have relief from forfeiture and specific performance of their Agreement. In light of this conclusion, there is no need to address the removal of the Caution or the request by the applicants for a Certificate of Pending Litigation.

[77] As to the agreement to sell Unit 421 to Sofia and Andre, I find that this agreement is null and void. It was a transaction between parties who are not at arm's length, and does not contain commercially reasonable terms. 185, which is controlled by Mario and Francisco, purported to resell the Lucas's Unit to Francisco's children for a price that was still below market value (yet higher than what was to be paid by the applicants). The deposit was unreasonably small and the agreement to secure almost all of the balance of the purchase price by a promissory note is a strong indication that this was not an arm's length, legitimate transaction. To the extent that Andre and Sofia may have paid the deposit, which is in some doubt based on Andre's evidence, they have been more than reimbursed for it from the rental payments of $2,250 per month which Sofia has been receiving since the Unit was rented in May, 2019. In these circumstances, I conclude that the transaction was a sham, intended by the respondents to prevent the applicants from acquiring title to Unit 421.

Conclusion

[78] I order that the Agreement be performed, with a closing date of January 31, 2020, or, if the applicants need more time, it shall close no later than February 14, 2020. All deposits shall be credited towards the purchase price in accordance with the Agreement. The agreement of purchase and sale between 185 and Sofia and Andre is declared to be null and void. The lease of the Unit shall on closing be assigned to the applicants as lessors and all further rent payments by the lessees shall be paid to the applicants. Other relief sought by the respondents is dismissed.

[79] The applicants are entitled to their costs of this application. The applicants shall provide me with written costs submissions as to scale and quantum not exceeding three pages, double spaced (not including supporting documents), within three weeks of the release of these Reasons. The respondents shall file submissions of a similarly restricted length within two weeks of the receipt of the applicants' submissions.

Schabas J.

Date: 2020-01-02

COURT OF APPEAL FOR ONTARIO

CITATION: Lucas v. 1858793 Ontario Inc. (Howard Park), 2021 ONCA 52
DATE: 20210128
DOCKET: C67896 & C67904

Hoy, Brown and Thorburn JJ.A.

BETWEEN

Alexandre Alberto Da Silva Lucas and Kelly Ramos Avelar Lucas

Applicants (Respondents)

and

1858793 Ontario Inc. o/a Howard Park,
Sofia Ribeiro and Andre Ribeiro

Respondents (Appellants)

William Ribeiro, for the appellant, 1858793 Ontario Inc. o/a Howard Park

Andreas G. Seibert, for the appellants, Sofia Ribeiro and Andre Ribeiro

Leon J. Melconian, for the respondents, Alexandre Lucas and Kelly Lucas

Heard: November 12, 2020 by video conference

On appeal from the order of Justice Paul Schabas of the Superior Court of Justice, dated January 2, 2020 with reasons reported at 2020 ONSC 964, 17 R.P.R. (6th) 138.

BROWN J.A.:

I. OVERVIEW

[1] This appeal concerns an agreement of purchase and sale for a small, one-bedroom residential condominium unit in the west end of Toronto. The two main issues are: (1) whether the application judge erred in concluding that the vendor

wrongfully terminated the agreement; and (2) whether the application judge erred in granting the purchasers the remedy of specific performance.

[2] By way of overview, in January 2015, the appellant vendor, 1858793 Ontario Inc. o/a Howard Park ("185"), and the respondent buyers, Alexandre and Kelly Lucas ("Alex" and "Kelly" or, together, the "Lucases"), entered into an agreement, pre-construction, for the purchase and sale of a condominium unit in Toronto (the "Agreement") for a price of $369,900.

[3] 185, a condominium development company, is owned and operated by Mario and Francisco Ribeiro ("Mario" and "Francisco" or, together, the "Ribeiro Brothers"). Alex worked for a roofing company owned by the Ribeiro Brothers from 2009 until 2017, when he left to join a competitor.

[4] In February 2019, just prior to the sale's scheduled closing, 185 purported to terminate the Agreement and forfeit the Lucases' deposit of $73,980. 185 claimed that the Lucases had breached the Agreement by leasing the unit to a tenant, Renato Duarte, during the interim occupancy period without 185's permission.

[5] On March 12, 2019, 185 entered into an agreement to re-sell the unit to the appellants Sofia and Andre Ribeiro ("Sofia" and "Andre"), who are Francisco's children and Mario's niece and nephew. In May 2019, during the interim occupancy period under that agreement, Sofia and Andre leased the unit to two tenants with

185's consent. The Lucases registered a caution on title which prevented the sale to Sofia and Andre from closing.

[6] The Lucases commenced this application seeking relief from forfeiture and, in effect, specific performance of the Agreement. The application judge granted both. He concluded that 185 had wrongfully terminated the Agreement, declared the sale to Sofia and Andre null and void, and ordered 185 to close the sale of the property to the Lucases.

[7] The appellants appealed. 185 sought a stay of the judgment pending appeal. MacPherson J.A. dismissed the motion by order dated February 14, 2020, following which title to the unit was transferred to the Lucases. They took possession of the unit on April 1, 2020 and, with the consent of the appellants, placed a $200,000 mortgage on title in June 2020.

[8] The appellants advance three main grounds of appeal.[1] First, they argue the application judge erred by finding that 185 wrongfully terminated the Agreement. Second, they submit the application judge misapplied remedial principles in awarding specific performance. Finally, they say the application judge had no basis to interfere with 185's subsequent sale of the unit to Sofia and Andre and disrupt

[1] 185 abandoned its appeal of the application judge's order with respect to relief from forfeiture and released $73,980 in deposit monies to the Lucases.

the rights of their tenants, who were not parties to the application and had no opportunity to respond.

[9] I would dismiss the appeal. The record supports the application judge's finding that 185 lost its right to terminate by declining to treat the Agreement at an end within a reasonable time following the Lucases' alleged breach. Further, the application judge correctly identified the principles governing the remedy of specific performance. I see no reversible error in his application of those principles to the facts of this case or his order that 185 perform the Agreement and transfer the unit to the Lucases rather than to Sofia and Andre.

II. ISSUE 1: 185's TERMINATION OF THE AGREEMENT

A. The evidence

[10] Alex and Kelly are married. At the time they entered into the Agreement, they had one child; at the time of judgment, they had two.

[11] In 2009, Alex began working for Triumph Roofing and Sheet Metal Inc. ("Triumph"), a company owned and operated by the Ribeiro Brothers. Over the next few years, Alex and Kelly became friends with Mario and Francisco. By 2015, Alex had been promoted to manager of Triumph's roofing division.

The Agreement for Unit 421

[12] On January 11, 2015, the Lucases and 185 entered into the Agreement for Unit 421 at 38 Howard Park Avenue in Toronto, which was to be a 595 square-

foot, one-bedroom unit located on the fourth floor of an eight-storey building (the "Unit"). The Agreement set the purchase price at $369,900 and would have required the Lucases to make five deposit payments totalling $73,980 by the occupancy date, which was yet to be determined.

[13] However, Mario deposed that 185 offered the Unit to the Lucases on "advantageous terms" based on their friendship, Alex's long-standing employment with Triumph, and the expectation that Alex would remain a key Triumph employee "for years to come". These terms, added by separate amendments to the Agreement, included the following:

(i) a $15,000 credit toward the purchase price, $5,652.26 of which the Lucases used to pay for upgrades to the Unit; and

(ii) the ability to stretch out payment of part of the deposit in twenty interest-free monthly increments of $1,000 payable from March 2015 to October 2016, with the balance due on occupancy.

[14] Section 18 of the Agreement prohibits the buyers from leasing the Unit prior to the closing date without the vendor's written consent, stating, in part:

> 18. The Purchaser covenants and agrees with the Vendor not to … offer for lease … the Unit, at any time prior to the unit Transfer Date without first … obtaining the written consent of the Vendor … The Purchaser acknowledges and agrees that once a breach of the preceding covenant occurs such breach is or shall be incapable of rectification, and accordingly the Purchaser acknowledges and agrees that in the event of such

> breach the Vendor shall have the unilateral right and option of terminating this Agreement and Occupancy License, effective upon delivery of notice of termination to the Purchaser or Purchaser's solicitor, whereupon the provisions of this Agreement dealing with the consequence of termination by reason of the Purchaser's default, shall apply…. [Emphasis added.]

[15] Section C.12 of the Terms of Occupancy License, attached as Schedule "C" to the Agreement, contains a similar prohibition, stating in part that "the Purchaser shall not have the right to assign, sublet or in any other manner dispose of the Occupancy License during Interim Occupancy without the prior written consent of the Vendor".

[16] Section 17 of the Agreement provides that the buyers agree not to register a caution or certificate of pending litigation against title to the Unit.

Alex leaves Triumph

[17] In January 2017, Alex resigned from Triumph to become part owner of a competitor company called Maxim Roofing Limited ("Maxim"). As a result, Alex's relationship with the Ribeiro Brothers soured. Mario believed Alex was trying to poach Triumph employees to work for Maxim.

The Lucases take possession of Unit 421

[18] 185 advised the Lucases that the Unit would be ready for occupancy on April 20, 2018. The Lucases signed an interim occupancy agreement requiring them to provide 185 with 12 post-dated monthly occupancy cheques for $1,548.03 each.

[19] During the interim occupancy period and before the Agreement could close, 185 needed to address outstanding building deficiencies and register the condominium declaration on title. Registration would not occur until February 21, 2019.

[20] On April 20, 2018, the Lucases took possession of the Unit. By that time, they had paid all required deposits, totalling $73,980.

Renato Duarte moves into Unit 421

[21] The Lucases did not move into Unit 421 upon taking possession; they allowed Mr. Duarte to move in.

[22] Mr. Duarte and Alex met in 2016, when Mr. Duarte worked for Triumph as a roofing foreman. In 2017, after Triumph let Mr. Duarte go, Alex hired him to work for Maxim.

[23] In April 2018, Mr. Duarte told Alex he was having financial problems and needed a place to stay. The Lucases agreed to let Mr. Duarte live in the Unit rent-free “until he got back on his feet”. Mr. Duarte moved into the Unit on May 1, 2018.

185 alleges a breach of the Agreement

[24] In late July 2018, Mario became aware that Mr. Duarte was living in the Unit, when he was advised of such by 185 employees who worked in the building.

[25] On September 21, 2018, Ms. Vanessa Spagnuolo, on behalf of 185, emailed Kelly to advise that 185 had been unable to address certain deficiencies in the Unit because Mr. Duarte, whom Ms. Spagnuolo referred to as a "tenant", had denied access to 185 contractors. Ms. Spagnuolo told Kelly that Mr. Duarte's occupancy was a breach of s. 18 of the Agreement:

> I would like to take this opportunity to bring to your attention the terms of [the Agreement] with respect to leasing. As per item 18 … you are currently in breach of [the Agreement]. As per [the Agreement], written consent of [185] is required to offer for lease or lease the unit … All requests for leases are at the sole discretion of our management and are only reviewed once all deficiencies are signed off … please expedite permission to allow deficiencies to be completed, once they are completed / signed by You with site staff you may request permission to lease / rent the unit … until then we will consider you to be in breach of [s. 18 of the Agreement].

[26] Kelly replied by email on the same day and denied that Mr. Duarte had refused access to the Unit. She also asserted that Mr. Duarte was not leasing the Unit, writing:

> I'm familiar with the terms of [the Agreement] but in regards to Mr. Duarte, he does not lease the unit. We do not have any type of rental agreement with him nor have we ever received any type of compensation from him.

[27] On October 1, 2018, Mr. Duarte was arrested following a police search of the Unit. He vacated the Unit and did not return.

[28] After Mr. Duarte's departure, the Unit remained unoccupied. 185 continued to cash the Lucases' monthly occupancy cheques. In November 2018, the Lucases permitted 185 to enter the Unit on several occasions to rectify various deficiencies.

[29] 185 did not raise the Lucases' alleged breach of s. 18 again until December 2018, in the context of a dispute over a bathtub repair (the "Bathtub Dispute").

The Bathtub Dispute

[30] A gouge in the Unit's bathtub was identified in the late spring or summer of 2018. In an email to Kelly dated August 9, 2018, a 185 employee acknowledged it was the company's responsibility to fix the deficiency with the bathtub.

[31] On November 23, 2018, the Lucases attended the Unit for a Tarion inspection, which revealed that the bathtub gouge had not been rectified.

[32] On December 6, Mr. Ross Eskandari, another 185 employee, informed the Lucases that 185 had opted to repair – not replace – the bathtub. Mr. Eskandari also suggested that Mr. Duarte had caused the damage to the bathtub and again alleged that the Lucases had breached the Agreement. He gave the Lucases two options:

> Option 1 – We have completed a second tub repair as a courtesy to you … We ask that you review the work in person and trust that you will find it acceptable. If accepted, we ask that you remove it from your deficiency list to close this item.

> Option 2 – If on the other hand you do not accept the repair & we are directed to replace the tub by Tarion, we will proceed with a full tub replacement in protest. All costs involved with your unit and breach of the occupancy agreement with regards to leasing will be tabulated at closing. We reserve the right to have all costs be included as part of your settlement fees owed to the developer prior to closing. [Emphasis added.]

[33] In an email dated December 19, 2018, Ms. Spagnuolo suggested that 185 would "pursue" the Lucases for the alleged breach stemming from Mr. Duarte's occupancy if they did not release 185 from its obligation to replace the bathtub:

> Without prejudice, we are willing to come to an agreement for a limited time. If the bathtub repair that we completed in good faith, which was caused by your tenant, along with all other Tarion issues are cleared, [185] will not pursue your breach of the occupancy agreement any further. If you are not in agreement please advise and we will consult with Tarion for next steps.

[34] The Lucases were not satisfied with the repair and refused to sign off.

[35] On January 2, 2019, Tarion determined that the damage to the bathtub was not consistent with "homeowner use", confirming it was 185's responsibility to replace the tub. Nevertheless, 185 continued to urge the Lucases to sign off on the repair in exchange for relief from their "breach of the occupancy agreement". The Lucases once again refused.

[36] By email dated January 22, 2019, 185 advised the Lucases it would replace the bathtub "in protest" and that "all costs related to [the Unit] associated with

damage caused by your tenant will be tracked and kept in claim of your breach of occupancy agreement".

[37] 185 replaced the bathtub on January 28, 2019.

185 purports to terminate the Agreement

[38] A week later, on February 5, 2019 – which was about two weeks prior to the scheduled closing date for the Unit – 185 sent a letter to the Lucases purporting to terminate the Agreement on the basis of Mr. Duarte's occupancy. (Mr. Duarte had vacated the Unit a little over four months earlier.) The letter stated, in part:

> We refer you to Section 18 in the Agreement in which the section sets out that the unit cannot be leased to a tenant without the prior written consent of the vendor. We have learned that you leased the unit to a third party tenant which is a fundamental breach … entitling us to terminate your Agreement. Section 18 goes on further to state that once a breach of this covenant occurs, the breach is incapable of rectification and that we have the unilateral right to terminate your [Agreement] effective upon delivery of this letter … We hereby terminate your [Agreement] and have had your deposits and occupancy fees forfeited to us as liquidated damages.

[39] By the time they received the termination letter, the Lucases had paid 185 a total of $93,534.70, covering the deposits, $15,482 in monthly interim occupancy fees for the period May 2018 through February 2019, and other expenses. 185 claimed it was entitled to retain the entire sum based on the Lucases' alleged breach of s. 18.

185 agrees to sell the Unit to Sofia and Andre

[40] Just over a month later, on March 12, 2019, 185 agreed to sell the Unit to Francisco's children, Sofia and Andre, for a purchase price of $418,000. Edgar Shamilyan, a realtor retained by 185 to provide an expert report, placed a significantly higher value on the Unit. In his report dated May 1, 2019, Mr. Shamilyan opined that the base price for the Unit at the time of his report was approximately $489,000. Another realtor retained by 185, Alexandre Alves, in his April 26, 2019 expert report, valued the Unit at $500,000 to $520,000.

[41] The agreement required Sofia and Andre to put down $5,000 at signing and another $13,000 on the closing date, which had not been set. Mario also advised Sofia that, because she was family, 185 would agree to act as the lender to finance the balance of the purchase price. The loan was secured by a promissory note and a vendor take-back mortgage, with a yearly interest rate of 3%.

[42] In May 2019, Sofia and Andre obtained 185's permission to lease the Unit during the interim occupancy period. A one-year lease of the Unit to two non-party tenants was signed on May 23, 2019.

[43] On March 19, 2019, a week after 185 agreed to sell the Unit to Sofia and Andre, the Lucases commenced this application against 185 seeking relief from forfeiture and specific performance of the Agreement. The application did not seek damages as an alternative to, or in lieu of, specific performance. On April 1, they

also registered a caution on title, which prevented the sale to Sofia and Andre from closing pending the outcome of this litigation. On May 15, 2019, the Lucases amended their application to add Sofia and Andre as parties.

B. Reasons of the application judge

[44] On the application, the Lucases argued they had not breached s. 18 of the Agreement because they never had a lease agreement with Mr. Duarte and he never paid rent. In the alternative, if they had breached s. 18, the Lucases submitted that 185 had not treated Mr. Duarte's occupancy as a fundamental breach within a reasonable time and had thereby waived its termination and forfeiture rights.

[45] The application judge agreed with the Lucases in both respects. First, he found that the Lucases had simply "loaned" the Unit to Mr. Duarte for a short time, without a lease agreement, and had received no rent or other benefits from him. As such, he held there was no lease and therefore no breach of s. 18: at para. 31.

[46] Even if there had been a breach, the application judge concluded that 185 affirmed the Agreement by its conduct after learning of Mr. Duarte's occupancy: at para. 45. He found 185 became aware of the alleged breach by September 21, 2018 "at latest", the day Ms. Spagnuolo told Kelly that Mr. Duarte had denied access to the Unit. Nevertheless, 185 did not exercise its right to treat the contract at an end within a reasonable time. Instead, it continued to accept occupancy

payments until February 2019, only “vaguely” purporting to rely on s. 18 as a “bargaining chip” in the Bathtub Dispute. 185 thus lost the right to terminate and, as of February 2019, “nothing stood in the way of closing the sale”: at paras. 39-42.

C. The issue stated

[47] For the purposes of my analysis, I shall assume, without deciding, that the Lucases breached s. 18 by allowing Mr. Duarte to live in the Unit during the occupancy period without 185’s written consent. My analysis will focus on 185’s submission that the application judge erred in finding that 185 lost its right to terminate by failing to treat the Agreement at an end within a reasonable time after the alleged breach.

[48] 185 submits that it did not lose or waive its contractual termination rights as the Agreement was clear that any breach of s. 18 was “incapable of rectification”. The emails exchanged with Kelly on September 21, 2018 show that, contrary to the application judge’s findings at paras. 42-45, 185 insisted on strict compliance with s. 18 of the Agreement as soon as it learned Mr. Duarte was living in the Unit. From this point on, 185 says it was entitled to terminate “unilaterally”. As such, and since the Agreement did not expressly require timely termination, 185 argues the application judge erred by concluding 185 waived its right to terminate by failing to do so “within a reasonable time”.

[49] In any event, 185 contends that it did terminate within a reasonable time. From December 6, 2018 to January 11, 2019, the parties exchanged emails regarding the Bathtub Dispute which 185 says were privileged "settlement communications" relating to the Lucases' alleged breach of s. 18. 185 argues that, when the period during which these emails were exchanged is removed from the calculation, its decision to terminate in February 2019 was made only "three months" after it gave the Lucases notice of the breach on September 21, 2018. According to 185, three months was a reasonable period between the notification of breach and the notice of termination.

D. Analysis

[50] Section 18 of the Agreement provides that if a purchaser leases a unit during the occupancy period without first securing the vendor's written consent, a breach occurs and "such breach is or shall be incapable of rectification." However, while the breach may be "incapable of rectification", such a breach does not cause an immediate termination of the Agreement. As s. 18 goes on to state, "in the event of such breach the Vendor shall have the unilateral right and option of terminating this Agreement and Occupancy License."

[51] Upon learning of Mr. Duarte's occupancy of the Unit, 185 did not exercise its termination rights under s. 18 of the Agreement. It waited many months before so doing. During that period, 185 accepted the Lucases' monthly interim

occupancy payments and worked to remedy the bathtub deficiency. This conduct by 185 led the application judge to state, at paras. 37 to 39, that:

> The problem … is that 185 did not treat [the Agreement] at an end; to the contrary, it did not treat the breach as "fundamental" or "incapable of rectification" at all … [185] took no steps to investigate or require compliance with section 18 of the Agreement until it raised the issue in September 2018, in the context of an emerging dispute between the Lucases and 185 about deficiencies. Spagnuolo's September 21 email did not terminate the Agreement, but suggested the breach could be cured by signing off on deficiencies.
>
> 185 did not respond to Kelly's denial of a breach on September 21, 2018, and did not raise the issue again until December, long after the breach, if any, had been cured. Throughout this time, 185 continued to cash the applicants' cheques paying the monthly occupancy fee.
>
> Only on December 19, 2018, was the alleged breach raised again, as a bargaining chip over the bathtub repair – a repair 185 was obliged to make. The applicants objected to 185's demands, and 185 continued to treat the contract as extant and continued to take the applicants' monthly occupancy fees. 185's demand was repeated on January 11, 2019, though it never said the contract would be terminated if the Lucases did not agree to 185 not repairing the bathtub. 185's email of January 22 was even more tactical, saying that the tub would be repaired "in protest" ….

[52] That course of events led the application judge to conclude, at para. 42, that:

> In my view, by not treating the Agreement at an end and "incapable of rectification" when it knew of the breach, at latest, by September 21, 2018, 185 lost the right to terminate and claim the deposits and fees as liquidated damages. It sat on its rights, to the detriment of the applicants, who continued to pay occupancy fees and

> expected to close the sale in early 2019. Assuming there had been a breach between May 1 and October 1, 2018, that breach was rectified and both parties acted on that basis from October 1 forward. There was no breach in February 2019 and nothing stood in the way of closing the sale. 185 acted wrongly in terminating the Agreement.

[53] In reaching that conclusion, the application judge did not commit any error of law. He correctly identified the applicable legal principle. Even if the Lucases' breach could be characterized as repudiatory, on the basis that s. 18 of the Agreement describes that particular kind of breach as one "incapable of rectification", an innocent party must elect to treat the contract at an end and communicate that election to the repudiating party "within a reasonable time": *Place Concorde East Ltd. Partnership v. Shelter Corp. of Canada Ltd.* (2006), 270 D.L.R. (4th) 181, at para. 50.

[54] Nor do I see any palpable and overriding error of fact in the application judge's finding that 185 failed to elect to treat the Agreement as at an end within a reasonable time. The record amply supports that finding of fact by the application judge.

[55] I am also not persuaded by 185's submission that the application judge should have treated the Bathtub Dispute emails as privileged "settlement communications". The application judge held, at para. 46 of his reasons, that the emails are not properly characterized as settlement communications:

> This submission has no merit. First, only one email, dated December 19, states it is "without prejudice". Second, these are not settlement discussions between lawyers; they are communications between the parties regarding their positions on the performance of a continuing contract, including the fulfillment of 185's obligation to repair and resolve deficiencies in the Unit. There is no basis to treat them as being inadmissible on the basis of settlement privilege.

[56] I see no error in that characterization. The emails focused on how the vendor would remedy a construction deficiency with the bathtub: the vendor wanted to patch the bathtub; the Lucases wanted the bathtub replaced. The emails did not purport to compromise the dispute that is the subject-matter of this litigation – namely, whether 185 was entitled to terminate the Agreement because the Lucases had permitted Mr. Duarte to occupy the Unit for a period of time. That litigious dispute was not yet in existence or within contemplation: *Losenno v. Ontario Human Rights Commission* (2005), 78 O.R. (3d) 161 (C.A.), at para. 21; Sidney N. Lederman, Alan W. Bryant & Michelle K. Fuerst, *Sopinka, Lederman & Bryant: The Law of Evidence in Canada,* 5th ed. (Toronto: LexisNexis Canada, 2018), at §14.348; *Bercovitch v. Resnick*, 2011 ONSC 5082, at para. 26, leave to appeal refused, 2011 ONSC 6410 (Div. Crt.). To the contrary, the two options set out in the vendor's email of December 6, 2018 – reproduced at para. 32 above – specifically contemplated that the Agreement would close even if the Lucases insisted on the replacement of the bathtub.

[57] As well, from the language of the Bathtub Dispute emails, the Lucases could not have contemplated that a disagreement over how to repair the bathtub would lead 185 to terminate the Agreement and trigger this litigation. The application judge was therefore entitled to rely on the Bathtub Dispute emails to support his finding that 185 did not treat the Lucases' alleged breach of s. 18 as fundamental or "incapable of rectification".

E. Conclusion on Issue 1

[58] Accordingly, I am not persuaded by this ground of appeal. I see no reversible error in the application judge's finding that 185, by its conduct, lost the right to rely on the alleged breach by the Lucases as a basis to terminate the Agreement.

III. ISSUE 2: THE AVAILABILITY OF SPECIFIC PERFORMANCE

A. The application judge's reasons and order

[59] As remedies for 185's wrongful termination, in their application the Lucases sought relief from forfeiture of the deposit and specific performance. The Lucases did not seek damages in lieu of specific performance.

[60] The application judge first exercised his discretion under s. 98 of the *Courts of Justice Act*, R.S.O. 1990, c. C.43 to grant the Lucases relief from forfeiture, concluding the applicable test was "clearly met": *Saskatchewan River Bungalows Ltd. v. Maritime Life Assurance Co.*, [1994] 2 S.C.R. 490. 185 does not contest that part of his judgment.

[61] He then considered whether the Lucases were entitled to specific performance based on three factors: (1) the nature of the property, particularly its "uniqueness" within the meaning of *Semelhago v. Paramadevan*, [1996] 2 S.C.R. 415, at para. 22; (2) the related question of the inadequacy of damages as a remedy; and (3) the behaviour of the parties: *Matthew Brady Self Storage Corp. v. InStorage Limited Partnership*, 2014 ONCA 858, 125 O.R. (3d) 121, at para. 32, leave to appeal refused, [2015] S.C.C.A. No. 50.

[62] With respect to the nature of the property, the application judge held, at paras. 59 and 64, that uniqueness arose not from the Lucases' subjective needs or the Unit's physical characteristics, but because the Agreement contained "advantageous terms" and could not have been readily duplicated in Toronto's competitive, volatile real estate market: *1954294 Ontario Ltd. v. Gracegreen Real Estate Development Ltd.*, 2017 ONSC 6369, 80 C.L.R. (4th) 297, at para. 151.

[63] Relatedly, the application judge concluded that the circumstances surrounding the Agreement rendered damages inadequate. The Lucases paid over $90,000 toward the Unit from January 2015 to February 2019. During this time, as the Unit increased in value "significantly" along with much of Toronto's housing market, this money was not available to the Lucases for acquiring another property. The application judge commented that the litigation would likely "drag for years" if the Lucases were limited to suing for damages, during which time the Lucases would be denied "the advantage of the rise in value of the Unit that exists

today" as well as the use of their deposit. In other words, the Lucases' losses were difficult to mitigate, making specific performance a "more complete and just remedy" than damages in the circumstances: at paras. 63-65.

[64] Finally, the application judge held that 185's conduct favoured granting specific performance. 185 had continued to accept payments from the Lucases while "improperly" trying to use the allegation of a breach to avoid its responsibility to replace the bathtub. It then terminated the Agreement and took the Lucases' deposit without justification, long after Mr. Duarte had vacated the Unit: at para. 75. Moreover, 185's subsequent sale to Sofia and Andre, which was not at arm's length and did not contain commercially reasonable terms, was a "sham" designed to put the Unit out of the Lucases' reach: at paras. 66 and 77. As he amplified in his cost reasons, the application judge concluded the transaction was a sham in part because it involved a sale below market price, with little by way of an up-front payment: 2020 ONSC 1329, at para. 4.

[65] Based on the foregoing, the application judge concluded that specific performance was the best remedy to serve justice between the parties. He ordered 185 to complete the sale of the Unit to the Lucases in accordance with the Agreement no later than February 14, 2020, with all payments to date credited toward the purchase price. In addition, the application judge declared the sale to Sofia and Andre null and void and ordered the lease with their tenants assigned to the Lucases.

B. The issue stated

[66] The appellants contend that the application judge made three main errors in granting the Lucases specific performance of the Unit rather than directing an assessment of damages:

(1) awarding specific relief for a "generic" condominium unit that the Lucases now intend to sell, contrary to the principles governing specific performance of real estate contracts;

(2) finding that damages were inadequate as a remedy without evidence that (a) the Lucases would have had trouble finding a replacement property, or (b) damages would be difficult to assess; and

(3) holding that 185's behaviour favoured granting specific performance but failing to properly consider the Lucases' misconduct.

[67] Before explaining why I am not persuaded by these submissions, I first set out the principles applicable to a purchaser's claim for specific performance of a contract for the sale of residential property.

C. The governing principles

[68] The most appropriate place to start the analysis is by recalling first principles. In general, contractual remedies are intended to provide the non-breaching party with what the contract was to provide: Angela Swan, Jakub Adamski & Annie Na, *Canadian Contract Law,* 4th ed. (Toronto: LexisNexis

Canada, 2018), at §6.14. That usually is done by requiring the party in breach to pay, as damages, an amount of money that will provide the victim of the breach with the financial equivalent of performance: John D. McCamus, *The Law of Contracts,* 3rd ed. (Toronto: Irwin Law, 2020), at p. 971. However, as observed by The Honourable Robert J. Sharpe in *Injunctions and Specific Performance*, loose-leaf (2020-Rel. 29), 4th ed. (Toronto: Thomson Reuters, 2012), at §7.50:

> The existing regime of remedial law strongly favours the first option of damages and awards specific performance only in exceptional cases. Yet in many cases, specific relief may seem to be the only sure way to put the plaintiff in the position he or she would have been in had the contract been performed …The assessment of damages the innocent party has suffered can be a difficult, expensive and time-consuming task. Specific performance has the advantage of avoiding the problems and costs the parties and the judicial system must incur if damages are to be assessed. Perhaps more significant is the very real element of risk that the translation into money terms of the effect of the breach on the plaintiff may be inaccurate. Some cases will present more risk than others but it cannot be denied that the element of risk of error is virtually swept away if the court is able to make an order of specific performance. The innocent party receives the very thing bargained for rather than a monetary estimate of its worth. [Emphasis added.]

The overarching test for granting specific performance

[69] The basic rationale for an order of specific performance of contracts is that damages may not, in the particular case, afford a complete remedy: *Adderley v. Dixon* (1824), 57 E.R. 239 (Ch.), at p. 240; *Semelhago*, at para. 21; *Matthew Brady*, at para. 29. In *Semelhago*, the Supreme Court noted that at one time the common

law regarded every piece of real property as unique. However, in the contemporary real estate market, which is characterized by the mass production of urban residential housing, it cannot be assumed that damages for breach of contract for the purchase and sale of real estate would be an inadequate remedy in all cases: at para. 21. Accordingly, specific performance should not be granted as a matter of course absent evidence that "the property is unique to the extent that its substitute would not be readily available": at para. 22. Therefore, a party seeking specific performance must establish a fair, real, and substantial justification by showing that damages would be inadequate to compensate for its loss of the subject property: *Asamera Oil Corp. v. Seal Oil & General Corp.,* [1979] 1 S.C.R. 633, at p. 668.

[70] In his article "Death to *Semelhago*!" (2016) 39:1 Dalhousie L.J. 1, Professor Bruce Ziff commented, at p. 9, that "the change ushered in by *Semelhago* can be seen as one of degree, not principle." The point was made, in a slightly different way, by Lax J., in *John E. Dodge Holdings Ltd. v. 805062 Ontario Ltd.* (2001), 56 O.R. (3d) 341 (S.C.), aff'd (2003) 63 O.R. (3d) 304 (C.A.), leave to appeal refused, [2003] S.C.C.A. No. 145. She ventured the view, at para. 55, that *Semelhago* did not replace the presumption of uniqueness with a presumption of replaceability.[2] Certainly the plaintiff bears the onus of demonstrating entitlement to the remedy of

[2] Low J. first made this point in *904060 Ontario Ltd. v. 529566 Ontario Ltd.*, [1999] O.J. No. 355 (S.C.), at para. 14.

specific performance. But what does that require the plaintiff to demonstrate? Lax J. stated, at para. 55:

> *Semelhago* asks us to examine in each case, the plaintiff and the property. The danger in framing the issue as one of uniqueness (a term that carries with it a pre-*Semelhago* antediluvian aroma) is that the real point of *Semelhago* will be lost. It is obviously important to identify the factors or characteristics that make a particular property unique to a particular plaintiff. The more fundamental question is whether the plaintiff has shown that the land rather than its monetary equivalent better serves justice between the parties. This will depend on whether money is an adequate substitute for the plaintiff's loss and this in turn will depend on whether the subject matter of the contract is generic or unique. [Emphasis added.]

[71] Whether specific performance is to be awarded or not is therefore a question that is rooted firmly in the facts of an individual case: *Matthew Brady*, at para. 32. In determining whether a plaintiff has shown that the land rather than its monetary equivalent better serves justice between the parties, courts typically examine and weigh together three factors: (i) the nature of the property involved; (ii) the related question of the inadequacy of damages as a remedy; and (iii) the behaviour of the parties, having regard to the equitable nature of the remedy: *Landmark of Thornhill Ltd. v. Jacobson* (1995), 25 O.R. (3d) 628 (C.A.), at p. 636. Whether a property is unique, either by virtue of its nature or the features of the contract for its purchase

and sale[3], operates as only one of several factors a court must consider when determining entitlement to specific performance.

[72] Against that backdrop of general principles, I shall examine the case law regarding each factor.

(i) The nature of the property

[73] In assessing whether a property is unique, courts may have regard to: (a) a property's physical attributes; (b) the purchaser's subjective interests, or (c) the circumstances of the underlying transaction. While physical and subjective uniqueness of property will usually be significant in cases where a purchaser – as opposed to a vendor – seeks specific performance, the types of uniqueness are not exclusive and no difference in evidential weight should be given to one form over another: Jeffrey Berryman, *The Law of Equitable Remedies*, 2nd ed. (Toronto: Irwin Law, 2013), at pp. 355-57.

[74] Uniqueness does not mean singularity or incomparability. Instead, it means that the property has a quality (or qualities) making it especially suitable for the proposed use that cannot be readily duplicated elsewhere: *Dodge* (S.C.), at para. 60. For example, a rising real estate market, particularly where the purchaser's deposit remains tied up by the vendor, may indicate that the transaction could not

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[3] *Domowicz v. Orsa Investments Ltd.* (1993), 15 O.R. (3d) 661, at pp. 687-88, aff'd (1998), 40 O.R. (3d) 256 (C.A.); *Matthew Brady*, at para. 39; *Di Millo v. 2099232 Ontario Inc.*, 2018 ONCA 1051, 430 D.L.R. (4th) 296, at paras. 70-74, leave to appeal refused, [2019] S.C.C.A. No. 55.

have been readily duplicated or that other properties were not readily available at the time of breach within the plaintiff's price range: *Walker v. Jones* (2008), 298 D.L.R. (4th) 344, at para. 165; *Sivasubramaniam v. Mohammad*, 2018 ONSC 3073, 98 R.P.R. (5th) 130, at paras. 84 and 92, aff'd 2019 ONCA 242, 100 R.P.R. (5th) 1.

[75] The court should examine the subjective uniqueness of the property from the point of view of the plaintiff at the time of contracting: *Dodge* (S.C.), at para. 59. The court must also determine objectively whether the plaintiff has demonstrated that the property or the transaction has characteristics that make an award of damages inadequate for that particular plaintiff: *Dodge* (S.C.), at para. 59; *Di Millo v. 2099232 Ontario Inc.*, 2018 ONCA 1051, 430 D.L.R. (4th) 296, at paras. 70-73, leave to appeal refused, [2019] S.C.C.A. No. 55.

[76] While units in cookie-cutter townhouses or condominium units may be considered less unique than other forms of property, some condominiums are truly unique: *Gillespie v. 1766998 Ontario Inc.*, 2014 ONSC 6952, 49 R.P.R. (5th) 65, at para. 26; *Landmark of Thornhill*, at p. 636. Even in the case of mass-produced condominiums, the issue remains whether the plaintiff has shown, upon the consideration of all the factors, that the land rather than its monetary equivalent better serves justice between the parties.

[77] Put another way, the specific performance analysis is not merely a search for uniqueness. As the case law discloses, other factors such as the inadequacy of damages as a remedy and the behaviour of the parties also play a role: *Landmark of Thornhill*, at p. 636; *Dodge* (S.C.), at para 55; *UBS Securities Inc. v. Sands Brothers Canada Ltd.*, 2009 ONCA 328, 95 O.R. (3d) 93, at para. 100.

(ii) Adequacy of damages

[78] As indicated above, one other factor is whether damages would be adequate to remedy the purchaser's loss. For instance, courts should be reluctant to award specific performance of contracts for property purchased solely as an investment, since money damages are well-suited to satisfy purely financial interests: *Southcott Estates Inc. v. Toronto Catholic District School Board*, 2012 SCC 51, [2012] 2 S.C.R. 675, at paras. 40-41.

[79] By contrast, if damages would be particularly time-consuming, difficult, or complex to compute, this may point in favour of specific performance: Sharpe J., *Injunctions and Specific Performance*, at §7.220; *Neighbourhoods of Cornell Inc. v. 1440106 Ontario Inc.* (2003), 11 R.P.R. (4th) 294, at paras. 112-14, aff'd (2004), 22 R.P.R. (4th) 176 (C.A.), leave to appeal refused, [2004] S.C.C.A. No. 390.

(iii) The behaviour of the parties

[80] A final factor involves considering the behaviour of the parties and weighing the equities at play in the transaction: *Paterson Veterinary Professional*

Corporation v. Stilton Corp. Ltd., 2019 ONCA 746, 438 D.L.R. (4th) 374, at para. 31, leave to appeal to S.C.C. refused, 38927 (April 2, 2020); *Matthew Brady*, at para. 32. A vendor's bad faith attempt to terminate a valid agreement of purchase and sale may support an order of specific performance against that party: *Gracegreen*, at para. 170.

D. Analysis

[81] In assessing the appellants' submission that the application judge misapplied the foregoing principles in granting specific performance, I shall address the three main errors alleged by the appellants.

First error: The Unit was not unique to the Lucases

[82] The appellants contend that Unit 421 was not unique to the Lucases in any way; it was merely a generic investment opportunity. They submit the application judge misapplied the applicable principles by awarding specific performance after finding, at paras. 59 and 61, that the Unit "cannot be described as physically unique" and that "uniqueness of the property in the sense that it has some special characteristic sought by the party, does not apply". According to the appellants, the fact the Lucases now intend to sell the Unit and buy a larger home – due to their expanding family – proves that Unit 421 is only valuable to them financially and therefore is not unique: *Southcott*, at paras. 38-40.

[83] I see no reversible error in the application judge's analysis. Although he acknowledged that the Unit is one of many similar properties available in Toronto at any given time, there is no rigid rule requiring a court to decline specific performance to a prospective purchaser in the absence of physical or subjective uniqueness. In determining whether a substitute for the Unit was "readily available" within the meaning of *Semelhago*, a court may look beyond the physical attributes or location of a property to examine the features of the purchase transaction.

[84] That is what the application judge did. At para. 64, he found that the Unit was unique based on "advantageous terms" in the Agreement. These terms included: (a) a $15,000 credit, part of which the Lucases used to customize the Unit with upgrades, and (b) the ability to stretch out payment of the deposit into small monthly increments. The appellants now argue that these terms were available to the public at large. However, 185's evidence on the application was that (a) the "overall deal" outlined in the Agreement was "unique to Alex Lucas" and (b) the deposit payment structure was only available to the Lucases, not to others, because of Alex's long-standing employment with Triumph. The Agreement locked in a home for the Lucases at a favourable price, along with the ability to slowly build their deposit. As long as they made their payments, they were insulated from market fluctuation while their home was being constructed and fitted with custom upgrades. On this basis, the application judge found that the

Agreement could not have been readily duplicated at the time of 185's wrongful termination in February 2019. I see no palpable and overriding error in that finding.

[85] This case is distinguishable from *Southcott*, where a developer sought specific relief with respect to property it had agreed to purchase solely as an investment. At the hearing, 185 acknowledged there was no evidence that the Lucases purchased Unit 421 as an investment property. Rather, the Lucases' evidence was that they intended to live in the Unit when they entered into the Agreement in 2015. Later, when their second child was born, they decided they needed more space. While the arrival of a second child before the Unit's closing date changed their plans to live in the Unit, Kelly deposed that their interest in completing the purchase of the Unit remained one tied to residential use, not investment – they could use the sale proceeds as the means to buy a 2-bedroom unit in the condominium in which to live. Accordingly, the evidence does not support the appellants' efforts to paint the Lucases' interest in the Unit as solely an investment opportunity.

Second error: The Lucases failed to establish the inadequacy of damages

[86] The second alleged error concerns the application judge's finding, at para. 65, that pursuing damages would deny the Lucases the advantage of the rise in value of the Unit, hindering their ability to buy a home "of the size and quality they could otherwise afford now". The appellants say the application judge failed to

acknowledge that damages would be assessed at the date of judgment based on a straightforward analysis of the Unit's fair market value. As such, damages would not be complex to assess and the Lucases would not lose out on any increase in value.

[87] The appellants further argue that the Lucases did not specifically plead that damages were inadequate or adduce evidence that it would have been difficult for them to obtain a similar property in Toronto. Therefore, the appellants submit that there was no basis on which to find damages inadequate and the application judge should have recognized the Lucases' duty to mitigate.

[88] I am not persuaded by the appellants' submissions for four reasons.

[89] First, the application judge found damages inadequate because of delay, not quantum. He did not ignore the practice that damages generally are assessed as of the date of judgment (or trial); he held that it would be unfair to make the Lucases wait any longer to be compensated for 185's misconduct.

[90] As I read his reasons, especially at para. 65, the application judge made three points:

(i) To accept 185's position that specific performance should not be available for a breach of a contract to sell a standard condominium unit where a vendor retains control of the purchaser's deposit would make it

difficult for purchasers to mitigate their damages. They would not be able to use their deposit to acquire a replacement property;

(ii) Even with a damages award in their pockets, purchasers such as the Lucases would still have to spend time and money pursuing their vendor, such as 185, if it did not immediately honour the judgment; and

(iii) Finally, a suit for damages could "drag on for years". I take the application judge to be pointing to the Lucases' choice to bring an application, rather than an action, to obtain their remedy for 185's breach. Bringing an application for specific performance would "better achieve justice than requiring the [Lucases] to sue for damages," as the application judge put the matter.[4]

I see no error in any of these points made by the application judge. Indeed, I agree with them.

[91] In regard to the application judge's comment that a suit for damages could drag on for years, I would note that an application is designed as a more stream-

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[4] In *Youyi Group Holdings (Canada) Ltd. v. Brentwood Lanes Canada Ltd.*, 2014 BCCA 388, 377 D.L.R. (4th) 701, the British Columbia Court of Appeal noted the advantages of the remedy of specific performance in providing greater access to justice in the courts, stating, at para. 49:

> In terms of the modern concept of access to justice, the remedy has much to be said for it, at least in the context of contracts for the sale and purchase of land. Certainly it is likely to be less expensive and time-consuming than the assessment of damages, which requires the parties to marshal expert evidence concerning the value of the land as at a particular date (which may be in issue) in what may be an unstable market….

lined device than an action to obtain a remedy, avoiding the delays and costs too often associated with productions, discoveries, and the scheduling of trials. And the potential advantage of an application over an action was demonstrated in this case: the Lucases issued their notice of application in March 2019 and obtained their judgment less than 10 months later, in January 2020. An example of the court's process satisfying the "service guarantee" promised by r. 1.04(1) of the *Rules of Civil Procedure* to secure "the just, most expeditious and least expensive determination of every civil proceedings on its merits": *Louis v. Poitras*, 2020 ONCA 815, at para. 33; 2021 ONCA 49, at para. 22.

[92] Second, the Lucases were not required to specifically plead the "inadequacy of damages", as the appellants contend. A claim for specific performance, by its nature, requires a court to inquire into whether damages would be an adequate remedy in the circumstances. While choosing not to plead damages as an alternative to specific performance may, in some circumstances, be a risky litigation strategy, it does not preclude a court from assessing the circumstances surrounding the transaction and subsequent litigation in exercising its remedial discretion. Accordingly, 185's contention that it was "taken by surprise" when the application judge considered inadequacy of damages is not tenable given the Lucases' claim for specific performance.

[93] Third, there was sufficient evidence to support the application judge's finding that damages were inadequate to compensate the Lucases. It is common ground

that prices in the Toronto real estate market rose significantly over the past several years. The evidence before the application judge was that the Unit had increased in value by about 40% between the signing of the Agreement in 2015 and 185's purported termination in 2019. Given that four years had elapsed between the execution of the Agreement and 185's wrongful termination, it was reasonable for the application judge to infer that it would have been difficult for the Lucases to find a property at a comparable price, particularly when 185 had seized their deposit.

[94] Finally, I do not accept the appellant's suggestion that in order to obtain specific performance the Lucases were required to prove they lacked the financial means to mitigate their loss. In their application, the Lucases claimed specific performance, not damages. In *Southcott*, the Supreme Court explained the interplay between a claim for specific performance and the obligation of the innocent party to mitigate when faced with a breach of contract. At para. 37, the court stated:

> *Asamera* set out the general principles governing mitigation: was the plaintiff's inaction reasonable in the circumstances, and could the plaintiff have mitigated if it chose to do so. Those principles apply to a plaintiff seeking specific performance. If the plaintiff has a "substantial justification" or a "substantial and legitimate interest" in specific performance, its refusal to purchase other property may be reasonable, depending upon the circumstances of the case.

[95] In assessing whether the plaintiff's refusal to purchase another property was reasonable, the defendant vendor bears the burden of proof. As the court went on

to state in *Southcott*, at para. 45: “[W]here it is alleged that a plaintiff has failed to mitigate damages, the onus of proof on a balance of probabilities lies with the defendant, who must establish not only that the plaintiff failed to take reasonable efforts to find a substitute, but also that a reasonable profitable substitute could be found.”

[96] The application judge obviously found that 185 had not discharged that onus. 185’s retention of the deposit evidently played a large role in the application judge’s analysis for he noted, at para. 64, that “the [Lucases’] deposits have been provided to 185, and that money has been, and remains, tied up in the property, unavailable for acquiring another property, as the market continues to rise.” The evidence also disclosed two other impediments to reasonable mitigation: (i) the expert evidence indicated that any potential substitute property in February 2019 would have been significantly more expensive than the contract price for the Unit; and (ii) the Agreement had provided the Lucases with special advantageous terms because of their relationship with the vendor’s principals.

[97] Given those circumstances, I see no error in the application judge’s determination that the Lucases had shown that specific performance of conveying the Unit, rather than awarding its monetary equivalent, better served justice between the parties.

Third error: the Lucases behaved inappropriately, not 185

[98] The appellants also contend the application judge failed to consider that the Lucases did not bring their claim for equitable relief with clean hands. Conversely, they argue that the subsequent sale to Sofia and Andre, while a "favourable deal", was legitimate. As such, the appellants say the application judge erred in finding that the behaviour of the parties weighed in favour of awarding specific performance against 185.

[99] I see no merit in this submission. The application judge considered and rejected essentially the same argument: at paras. 72-75. On appeal, 185 seeks to re-litigate the issue. Although 185 may disagree with the application judge's reasoning, I see nothing to suggest he made any palpable and overriding error in his application of the doctrine of clean hands.

[100] Further, as the application judge noted, at para. 75, the equities in this case strongly favour the Lucases. The Lucases upheld their end of the Agreement and expected 185 to do the same. Over the course of four years they made all required payments to secure ownership of the Unit. In September 2018, 185 took issue with Mr. Duarte's occupancy. However, 185 did not promptly invoke any right to terminate under the Agreement. Instead, it did nothing for months, only raising the matter again in December as leverage in the Bathtub Dispute, long after Mr. Duarte had already vacated the Unit. When that tactic failed, 185 terminated the

Agreement on the eve of closing, seized the Lucases' deposit, and re-sold the Unit to close relatives of the company's principals on favourable terms.

[101] The appellants submit that the application judge erred in finding, at para. 77, that the re-sale of the Unit to Sofia and Andre was "a sham, intended by the [appellants] to prevent the [Lucases] from acquiring title to Unit 421." While the word "sham" might overstate the commercially favourable aspects of the re-sale transaction, the evidence certainly supported the application judge's inference that 185 entered into that transaction to prevent the Lucases from acquiring title to the Unit. Specifically, the evidence revealed that:

(i) Sofia and Andre were the children of one of 185's principals;

(ii) The re-sale price of $418,000 was far below the then market price for the Unit, which 185's own experts valued at between $489,000 and $520,000;

(iii) The required deposit of $5,000 was only 1% of the purchase price, far lower in proportion than the deposit required of the Lucases on their purchase.[5] Another $13,000, or 3%, was to be paid on closing, with the balance financed by a vendor take-back mortgage from 185, the company owned by the purchasers' father and uncle;[6]

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[5] Sofia and Andre recovered their deposit through the rent paid by their tenants prior to the judgment and transfer of the Unit to the Lucases.

[6] Although the application judge, at paras. 22 and 77, stated that the agreement to secure payment of the balance of the purchase price was by way of a promissory note, not a mortgage, in my view this

(iv) Mario deposed that 185 offered the mortgage because he was aware that Sofia and Andre did not have the money to close the transaction;

(v) The re-sale was not the result of listing the Unit on the open market. Instead, Sofia deposed that her uncle approached her to advise that the sale of the Unit to a former Triumph employee was not proceeding; and

(vi) Sofia deposed that her uncle's overture occurred in early March 2019, just three weeks after 185 purported to terminate the Agreement.

[102] Given the evidence set out above in paras. 100 and 101, it certainly was open to the application judge to find that 185 acted in bad faith in terminating the Agreement and to take that conduct into account in granting equitable relief to the Lucases.

E. Conclusion on Issue 2

[103] Accordingly, I would dismiss the appeal with respect to remedy. I see no reversible error in the application judge's decision to grant specific performance in favour of the Lucases. He properly applied the controlling principles to the evidence before him. Rather than focus solely on the uniqueness of the Unit itself, he conducted a broad critical inquiry as to the adequacy of damages having regard to the circumstances of the transaction as a whole. Based on this inquiry, the

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mischaracterization is of no consequence. At the end of the day, the purchasers were offered financing for 96% of the purchase price by the company owned by their father and uncle.

application judge was entitled to conclude, as he did, that specific performance would best serve justice between the parties.

IV. ISSUE 3: THE SUBSEQUENT SALE TO SOFIA AND ANDRE

[104] The final issue on appeal concerns 185's subsequent sale of the Unit to Sofia and Andre. The appellants submit the application judge erred by ordering the lease with Sofia and Andre's tenants assigned to the Lucases. As non-parties to the litigation, the appellants submit that the tenants had no recourse to challenge the application judge's interference with their contractual rights. They say the lease should be re-assigned and all rent payments returned to Sofia and Andre.

[105] As a practical matter, this is no longer a live issue. At the hearing, respondents' counsel confirmed that Sofia and Andre's tenants voluntarily vacated the Unit on March 31, 2020, after paying only one month of rent to the Lucases. The Lucases re-took vacant possession of the Unit in April 2020.

[106] As well, given my conclusion that the application judge did not err in granting the Lucases specific performance of the Agreement, I see no error in that part of his judgment which, in effect, directed the Lucases to honour the lease with the then existing tenants of the Unit.

V. DISPOSITION

[107] For the reasons set out above, I would dismiss the appeal.

[108] I would order the appellants to pay the respondents their partial indemnity costs of the appeal fixed in the amount of $18,500, inclusive of disbursements and applicable taxes.

Released: “AH” JAN 28 2021

“David Brown J.A.”
“I agree. Alexandra Hoy J.A.”
“I agree. Thorburn J.A.”