

April 14, 2014

BY COURIER (2 COPIES) AND EMAIL

Ms. Kirsten Walli

Board Secretary, Ontario Energy Board
P.O. Box 2319, 2300 Yonge Street, Suite 2700
Toronto, Ontario M4P 1E4
BoardSec@ontarioenergyboard.ca

Dear Ms. Walli:

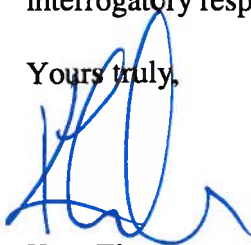
**Re: Environmental Defence Correspondence
EB-2013-0321 – Ontario Power Generation Inc. (“OPG”)
2014-2015 Payment Amounts Application**

I am writing pursuant to Procedural Order No. 4 regarding the issues Environmental Defence wishes to address at the technical conference in this matter.

Environmental Defence wishes to address the issues set out in the attached memo. To expedite the technical conference Environmental Defence is providing a list of questions for the technical conference. We ask that OPG review the list with its panel members prior to the technical conference. If OPG is able to advise prior to the technical conference which questions it is and is not willing to answer, we ask that it do so as this will save a considerable amount of time and resources.

Note that many of Environmental Defence's questions for the technical conference arise from its interrogatories, including interrogatories that were not adequately responded to. Environmental Defence is hopeful issues relating to its unanswered interrogatories can be remedied by undertakings at the technical conference. If they cannot be, please note that Environmental Defence intends to bring a motion to, among other things, obtain adequate interrogatory responses.

Yours truly,



Kent Elson

Encl.

cc: Applicant and Intervenors

EB-2013-0321
Ontario Power Generation (“OPG”) 2014-2015 Payment Amounts

Environmental Defence Information Requests for April 22, 2014 Technical Conference

Filed: April 14, 2014

Issue 2.1

Interrogatory #2.1-ED-2

OPG has not provided Environmental Defence with the annual values for the assets and liabilities of the newly regulated hydro facilities for the period 1999 to 2009. In addition, OPG has not provided the requested Ontario Hydro March 31, 1999 values for the assets and liabilities for the newly regulated hydro facilities.

Environmental Defence needs this information to determine:

- a) If OPG’s methodology for determining rate base for its newly regulated hydro facilities is consistent with the OEB’s methodology for calculating rate base, namely, historic cost minus depreciation; and
- b) The magnitude of the gap, if any, between the “cost” and “fair market” values for these assets.

OPG’s response to this interrogatory does not provide a reason with respect to why they have not provided us with the information that we have requested. We ask that the information requested in the interrogatory be provided.

Interrogatory #2.1-ED-3

OPG has not provided Environmental Defence with the annual values for the assets and liabilities of the newly regulated hydro facilities for the period 1999 to 2009. In addition, OPG has not provided the requested Ontario Hydro March 31, 1999 values for the assets and liabilities for the newly regulated hydro facilities.

We need this information to determine:

- a) If OPG’s methodology for determining rate base for its newly regulated hydro facilities is consistent with the OEB’s methodology for calculating rate base, namely, historic cost minus depreciation; and
- b) The magnitude of the gap, if any, between the “cost” and “fair market” values for these assets.

OPG's response appears to be that the gap between the "cost" and "fair market" value of these assets is irrelevant to this process since O. Reg 53/05 requires the OEB to accept the values for the assets and liabilities of the newly regulated hydro facilities as set out in OPG's most recently audited financial statement.

Environmental Defence does not dispute that the OEB must "accept" certain values pursuant to O. Reg 53/05. However, it is our position that the requested information is relevant to this proceeding, including for the following reasons:

- a) The OEB's rate making process must be transparent. If there is to be a departure from the OEB's standard procedure for determining rate base then the public needs to know that this is occurring and what its impact on rate base and rates will be.
- b) While O. Reg 53/05 may require the OEB to accept a "fair market" adder to the newly regulated hydro facilities' rate base, it does not specify the rate of return that the OEB must allow for the "fair market" adder to rate base. Therefore, intervenors and the OEB must know the value of this adder so that they can calculate a "fair to consumers" rate of return for the "fair market" adder to rate base.

We ask that the information requested in the interrogatory be provided.

Interrogatory #2.1-ED-4

OPG has refused to provide Environmental Defence with the "cost" values for the newly regulated hydro facilities with respect to gross plant, accumulated depreciation and amortization, and net plant.

For the same reasons outlined above with respect to interrogatory 2.1-ED-4, we ask that the information requested in the interrogatory be provided.

Issue 4.7

Note that some of the matters Environmental Defence wishes to raise with respect to issue 4.7 could be considered to also fall under issue 4.9 and 4.10.

Interrogatory #4.7-ED-5

- a) Please provide management's "high confidence" estimate of the total cost of the DRP in 2014\$ as requested in section (a) of Environmental Defence's interrogatory.
- b) Please confirm that OPG's 2013\$ and 2014\$ LUEC estimates for the DRP, namely, 8.2 and 8.3 cents per kWh respectively, are based on the total costs of the DRP including capitalized interest and escalation. See section (c) of our interrogatory.

- c) According to OPG's response to section (d) of Environmental Defence's interrogatory, OPG has calculated the DRP's LUEC using the OEB-approved after-tax return on capital for its existing regulated assets, namely 7%.

In its EB-2010-0008 Decision, the OEB said:

"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." [p. 116]

"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." [p. 118]

In 2005 CIBC World Markets estimated Bruce Power's cost of capital for the Bruce A refurbishment project. [October 17, 2005 letter to James Gillis, Ontario Deputy Minister of Energy from CIBC World Markets Inc., attached]

According to CIBC, a reasonable capital structure for Bruce Power would be between 20% and 40% debt. [See p. 9 of the attached letter]

According to CIBC, Bruce's cost of equity would be between 13.7% and 18.0%. [p. 10]

- i) Is it OPG's position that it can finance the DRP for an after-tax rate of return of only 7%? If yes, please justify this claim.
 - ii) Does OPG have any commitments from the Ontario Electricity Financial Corporation to providing financing for the DRP? Please describe OPG's plans to obtain the equity capital necessary to finance the DRP.
- d) In section (f) of Environmental Defence's interrogatory we asked for a break-out of the DRP LUEC according to a number of categories. OPG's response was not based on the total cost of the DRP. Please provide a break-out of the LUEC of the *total cost* of the DRP in 2013\$ and 2014\$ according to the following categories: (i) capital costs; (ii) fuel costs; and (iii) non-fuel operating costs.

Interrogatory #4.7-ED7

Environmental Defence asked for Darlington' capacity (MW), output (GWh) and annual capacity utilization factor for each year of its life.

OPG's response is deficient in two respects. First, it only provides data for the 2005 to 2013 time period. Second, it provides Darlington's "unit capability factor" instead of its annual capacity utilization factor.

OPG justifies its failure to provide pre-2005 data by referring to an EB-2007-0905 OPG response to a Pollution Probe interrogatory request for historic data about the costs of the Niagara Plant Group. We fail to see the relevance of this response to our request.

Environmental Defence needs to know Darlington's annual capacity utilization factors during each year of its operating life to help assess the reasonableness of OPG's LUEC calculations for the DRP which assume an annual capacity factor of 88% (see OPG response to 4.7-ED-5).

We ask that the information requested in the interrogatory be provided.

Interrogatory #4.7-ED-8

This interrogatory notes that OPG has compared the LUEC of the DRP with the LUEC of new natural gas-fired combined-cycle turbines. The interrogatory asks if OPG had also compared the DRP's LUEC with the LUECs of other alternative options such as increased energy efficiency, increased use of Ontario's existing generation facilities, increased water power imports from Quebec and new combined heat and power plants? If "yes", we asked OPG to provide copies of all such studies. If "no", we asked OPG to explain why not.

In its response, OPG referred us to a cost comparison analysis by the OPA. However, this is not responsive to our question since it does not tell us if OPG has done its own cost comparison analysis; and if "yes," it does not provide us with copies of its analysis.

Furthermore, the OPA analysis that OPG refers us to does not include an analysis of the marginal cost of increased use of Ontario's existing generating facilities or the cost of increased water power imports from Quebec.

In this context it is important to note that according to OPG's response to Board Staff Interrogatory #040, OPG stated that: "Cost competitiveness vis-à-vis other generation alternatives is one of many criteria that OPG's management provides to OPG's Board of Directors to aid their decision-making process."

We ask that the information requested in the interrogatory be provided.

Interrogatory #4.7-ED-9

OPG has not responded to Environmental Defence's request for the *incremental* cost of various generation options and it has not responded to the request for its estimate of the potential additional capacity (MW) and energy (GWh) that could be provided by various supply and conservation options.

Does OPG have the information we are seeking? If “yes,” please provide the requested information.

Issue 4.12

Interrogatory #4.12-ED-11

- a) Does the table on page 2 provide OPG’s break-out of all of OPG’s expected costs of the DRP with the exception of interest and escalation? If no, what are the other excluded costs?
- b) According to the table on page 3, assuming a 50% cost overrun, the total cost of the DRP will be \$10 billion excluding interest and escalation. Furthermore, according to the table, a 100% cost overrun would only raise the total cost of the project to OPG by \$200 million or 2% relative to a 50% cost overrun. This is counter-intuitive. Could you please explain the basis for this outcome.
- c) Please provide the total cost, including interest and escalation and all other costs, of the DRP under each of the cost overrun scenarios.
- d) Please provide the total LUEC of the DRP, including interest and escalation and all other costs, under each of the cost overrun scenarios.

Interrogatory #4.12-ED-14

This interrogatory reads as follows:

Appendix A of *The Darlington Re-Build Consumer Protection Plan* (attached) provides the original cost forecasts and the actual costs of Ontario’s nuclear projects. Does OPG dispute the accuracy of any of the facts provided in this Appendix? If “yes”, please state the facts that OPG disputes and provide OPG’s opinion as to the correct value(s).

The appendix attached to the interrogatory response details the history of nuclear cost overruns in Ontario based primarily on OPG’s own data. However, OPG refused to respond to the interrogatory on the grounds that this interrogatory “is an attempt to introduce this document into the record through an interrogatory on OPG’s evidence.” This is clearly not the case. The interrogatory asks OPG to estimate, based on its own data, the magnitude of past nuclear project cost overruns. We ask that the information requested in the interrogatory be provided.

Issue 6.3

Interrogatory #6.3-ED-15

Environmental Defence asked for Pickering’s total operating, maintenance and administration costs for various years. However, OPG’s response has not included Pickering’s fuel costs.

Furthermore, based on our analysis of your response to Board Staff Interrogatory #2, it appears that your responses have understated Pickering's non-fuel operating, maintenance and administration costs per MWh in 2014. Please see table below.

Pickering's Operating, Maintenance and Administration Costs in 2014

Base OMA - Pickering	\$20.11 per MWhⁱ
Base OMA - Support	\$8.49 per MWhⁱⁱ
Project OMA - Pickering	\$0.46 per MWhⁱⁱⁱ
Project OMA – Pickering Continued Operations	\$0.28 per MWh^{iv}
Project OMA - generic	\$4.49 per MWh^v
Outage OMA - Pickering	\$4.70 per MWh^{vi}
Outage OMA – Pickering Continued Operations	\$0.29 per MWh^{vii}
Outage OMA – Nuclear Support Divisions re: Pickering Continued Operations	\$0.58 per MWh^{viii}
Outage OMA – Nuclear Support Divisions - generic	\$1.57 per MWh^{ix}
Corporate Support & Administrative Costs	\$8.73 per MWh^x
Depreciation - Pickering	\$6.24 per MWh^{xi}
Depreciation – generic nuclear	\$2.13 per MWh^{xii}
Centrally Held Costs	\$8.41 per MWh^{xiii}
Asset Service Fee	\$0.47 per MWh^{xiv}
Nuclear Fuel Costs	\$5.64 per MWh^{xv}
TOTAL	\$72.59 per MWh

- a) Does OPG agree with the above calculations? If no, please explain why not and provide the correct number(s).
- b) Please provide Pickering's total operating, maintenance and administration costs including fuel costs for each year from 2010 to 2015.
- c) We asked OPG to provide a comparison of Pickering's total operating, maintenance & administration costs to the incremental costs of meeting Ontario's electricity needs in 2014 & 2015 by: (i) increased energy efficiency; (ii) increased output of Ontario's existing generating facilities; (iii) reduced electricity exports; and (iv) increased water power imports from Quebec.

In its response OPG just referred us to its response to Interrogatory #4.7-ED-9. However, OPG's response to Interrogatory #4.7-ED-9 does not provide us with the information we requested in our interrogatory #6.3-ED-15. We need this benchmark

information to help us determine if OPG's requested payments for its Pickering Nuclear Station are reasonable. Please provide the requested information.

-
- i \$428.3 million/21.3 million MWh; Tables 14 & 20
 - ii \$422.1 million/49.7 million MWh; Tables 14 & 20
 - iii \$9.9 million/21.3 million MWh; Tables 14 & 21
 - iv \$6 million/21.3 million MWh; Tables 14 & 21
 - v \$95.6 million/21.3 million MWh; Tables 14 & 21
 - vi \$100.1 million/21.3 million MWh; Tables 14 & 22
 - vii \$6.2 million/21.3 million MWh; Tables 14 & 22
 - viii \$12.3 million/21.3 million MWh; Tables 14 & 22
 - ix (\$90.4 – \$12.3 million)/49.7 million MWh; Tables 14 & 22
 - x \$433.9 million/49.7 million MWh; Tables 14 & 26
 - xi \$133.0 million/21.3 million MWh; Tables 14 & 28
 - xii \$105.9 million/49.7 million MWh; Tables 14 & 28
 - xiii \$418.2 million/49.7 million MWh; Tables 14 & 33
 - xiv \$23.3 million/49.7 million MWh; Tables 14 & 19
 - xv \$280.5 million/49.7 million MWh; Tables 14 & 19



CIBC
World Markets

CIBC World Markets Inc.
BCE Place, P.O. Box 500
161 Bay Street, 6th floor
Toronto, ON M5J 2S8

Tel: (416) 594-7000

October 17, 2005

The Ministry of Energy
880 Bay Street, 3rd Floor
Toronto, ON

Attention: James Gillis, Deputy Minister
Rosalyn Lawrence, Director

Dear Sirs and Mesdames:

We understand that, pursuant to a direction provided by the Government of Ontario¹ (the "Province") through the Ministry of Energy (the "MOE"), the Ontario Power Authority (the "OPA") is proposing to enter into a Bruce Power Refurbishment Implementation Agreement (the "RIA") with Bruce Power A L.P. (the "Supplier") and Bruce Power L.P. and a Bruce Power Sharing in Transfers and Refinancings Agreement (the "STAR" and, together with the RIA, the "Agreements") with the Supplier, Ontario Municipal Employees Retirement Board ("OMERS") and TransCanada Corporation ("TransCanada" and, together with OMERS, the "Partners").

The Agreements provide for, among other things, the refurbishment, restart, operation and maintenance of Units 1, 2, 3 and 4 ("Bruce A") of the Bruce Generating Station (and, together with Units 5, 6, 7 and 8 ("Bruce B"), the "Facility") and the supply of electricity produced by the Facility to the Independent Electricity System Operator ("IESO") - Administered Market (the "Proposed Transaction"). In addition, we understand that, in connection with the Proposed Transaction and pursuant to the direction provided by the Province through the MOE and direct negotiations with the Supplier, Ontario Power Generation Inc. ("OPG") is proposing to amend certain terms of its lease agreement dated May 12, 2001 (the "Lease Amendment") with the Supplier relating to the Facility.

We further understand that the Proposed Transaction has been structured to address certain of the Province's material objectives, including:

- i) securing the Supplier's commitment to refurbish and restart Units 1 and 2, refurbish Unit 3 and replace the steam generation equipment of Unit 4, in order to provide the Province of Ontario with additional generation capacity through the IESO Administered Market (the "Market");
- ii) transferring a reasonable portion of the operating and construction cost risk associated with the refurbishment of the Facility to the Supplier and away from the OPA and, by extension, ratepayers;

¹ In accordance with its powers under Section 25.32 (4) & (7) of the *Electricity Act*.

- iii) increasing certainty of capacity plans by establishing key milestone dates for the commencement or re-commencement of commercial operation of Bruce A; and
- iv) providing the Supplier an opportunity to earn a financial return that is commensurate with the risks associated with its commitment to refurbish and restart Units 1 and 2, refurbish Unit 3, replace the steam generation equipment of Unit 4 and operate Bruce A.

Engagement of CIBC World Markets

In April 2005, the MOE issued a request for proposals ("RFP") in connection with hiring a financial advisor to assist the MOE in its negotiations of the Proposed Transaction and, if requested, to deliver to the MOE a written opinion in respect of the Proposed Transaction.

By agreement dated as of May 27, 2005 (the "Engagement Agreement"), the MOE retained CIBC World Markets Inc. ("CIBC World Markets" or "we") to act as a financial advisor to the MOE in connection with the Proposed Transaction. In that capacity, we and our financial sub-advisor, Macquarie North America Ltd. ("Macquarie"), among other things (i) reviewed the Financial Model (defined below); (ii) assisted the MOE in completing its financial assessment of the Proposed Transaction; (iii) assisted the MOE in determining an appropriate weighted average cost of capital for the Supplier giving effect to the Proposed Transaction; and (iv) assisted the MOE and its legal advisors in negotiating the principal financial terms of the Agreements. We were not asked to identify or provide any financial advice or analysis regarding any potential alternatives to the Proposed Transaction.

Pursuant to the Engagement Agreement, the MOE has requested that we prepare and deliver this opinion (the "Opinion") as to the fairness to the OPA, from a financial point of view, of the principal financial terms of the Proposed Transaction. The MOE will pay CIBC World Markets a fee, a portion of which relates to the preparation and delivery of this Opinion, and we will share a portion of that fee with Macquarie. In addition, CIBC World Markets will be reimbursed for any reasonable out-of-pocket expenses incurred by CIBC World Markets in connection with the provision of its services. No part of CIBC World Markets' fee is contingent upon the conclusions reached in the Opinion or on the completion of the Proposed Transaction.

Credentials of CIBC World Markets

CIBC World Markets is one of Canada's largest investment banking firms with operations in all facets of corporate and government finance, mergers and acquisitions, equity and fixed income sales and trading and investment research. The Opinion expressed herein is the opinion of CIBC World Markets and the form and content herein have been approved for release by a committee of its managing directors and internal legal counsel, each of whom is experienced in merger, acquisition, divestiture and valuation matters.

Scope of Review

In connection with rendering our Opinion, we have reviewed and relied upon, among other things, the following:

- i) a term sheet dated as of July 29, 2005 negotiated between the MOE and the Supplier in connection with the Proposed Transaction;
- ii) a draft dated October 17, 2005 of the RIA;
- iii) a draft dated October 17, 2005 of the STAR;
- iv) a draft dated October 17, 2005 of the Third Amendment to the Amended and Restated Lease Agreement;
- v) the Bruce A financial model prepared by the Supplier (the "Financial Model"), reflecting several scenarios of the Supplier's forecast annual financial performance under two alternative business cases being (i) the *status quo* business case that excludes the effect of the Proposed Transaction (the "Status Quo Business Plan"); and (ii) the *pro forma* business case that gives effect to the completion of the Proposed Transaction (the "Pro Forma Business Plan"), for the years ended December 31, 2005 through December 31, 2036 including, among other financial information, a summary income statement, balance sheet and statement of changes in financial position, based upon numerous operating, financial and electricity price assumptions, including sensitivities thereto, agreed to by the Supplier and MOE with assistance from their respective advisors;
- vi) a report entitled "Technical Advice on Proposed Bruce A Contract" prepared by Brian Mark Consulting Inc. and R. Strickert & Associates Inc. (the "Technical Advisor"), the MOE's technical advisors in connection with the Proposed Transaction;
- vii) presentations made by senior management of the Supplier regarding the scope and material elements of the Supplier's restart and refurbishment plans for the Facility, as reflected in the financial terms of the Proposed Transaction;
- viii) a site tour of the Facility;
- ix) certain other internal information prepared and provided to us by the MOE and the Supplier's management, primarily financial in nature, concerning the Proposed Transaction and the Facility;
- x) certain publicly available financial information concerning the Supplier, the Facility and the nuclear power generation industry;
- xi) public information and financial analysis of other electricity and public utility companies, including data relating to public market trading; and
- xii) a certificate signed by two senior officers on behalf of the MOE attesting to the accuracy and completeness of the information provided to us.

In addition to the written information described above, CIBC World Markets participated in discussions with the representatives of the MOE, senior management of the Supplier and senior management of the Partners with regard to, among other things, the Agreements, the Proposed Transaction and the operations, financial position, key assets and financial and operating prospects of the Facility. CIBC World Markets has also participated in discussions with Blake, Cassels & Graydon LLP, external legal counsel to the MOE, McCarthy Tétrault LLP, external legal counsel to the Supplier, Macquarie, the Technical Advisor, electricity price forecast consultants engaged by the Supplier and

other industry consultants regarding the Agreements, the Proposed Transaction and related matters.

Our Understanding of the Facility

We understand that, pursuant to a lease agreement dated May 12, 2001 (the "Lease Agreement"), Bruce Power L.P., a partnership between TransCanada, OMERS, Cameco Corporation ("Cameco"), the Power Workers' Union and The Society of Energy Professionals (together the "Unions"), is the licensed operator of the Facility, which is located on Lake Huron in Tiverton, Ontario. The Facility houses two nuclear generating stations – Bruce A and Bruce B – and each generating station has four CANDU reactors. At present, six of the eight CANDU nuclear reactors are operational (Units 3, 4, 5, 6, 7 and B8). Bruce A and Bruce B are located over 5km apart and, as a result of the nature of the business and the licensing requirements of the Canadian Nuclear Safety Commission, have extensive staffing requirements which currently stand at approximately 3,800 employees.

We understand that the Bruce A Units were taken out of service between 1995 and 1998 after a decision by Ontario Hydro, which then owned and operated the Facility, to concentrate its resources on improving operations at its other nuclear generating stations. In 2001, Bruce Power L.P. entered into the Lease Agreement with OPG relating to the Facility. Units 3 and 4 were restarted between 2003 and 2004, following an approximate \$725 million investment², and Units 1 and 2 continue to sit idle. The business plan for the Facility presently anticipates that Units 3 and 4 will come offline in 2009 and 2017, respectively. We understand that the four units of Bruce B are expected to come offline at varying times between 2015 and 2018.

We understand that each of TransCanada, OMERS, and Cameco currently own 31.6% of the Facility, with the Unions owning the remaining 5.2%. We also understand that Cameco will not participate in the Proposed Transaction and, accordingly, that the Supplier will be formed in order for TransCanada and OMERS to pursue the refurbishment, restart and operation and maintenance of Bruce A, thereby increasing their respective interests in Bruce A from 31.6% to 47.4%. We also understand that the existing ownership arrangement for Bruce B will remain in place through the existing separate limited partnership between TransCanada, OMERS, Cameco and the Unions ("Bruce Power L.P.").

Our Understanding of the Agreements

We are not legal, accounting or tax experts. The following description of the Agreements does not purport to be a comprehensive summary of the Agreements and is intended solely to describe our understanding, as the MOE's financial advisors, of the material terms of the Agreements.

We understand that, in accordance with the terms of the Agreements and subject to certain conditions, the Supplier has agreed, at its own expense, to refurbish and restart Units 1 and 2, refurbish Unit 3 and replace the steam generators of Unit 4 (collectively,

² The original estimate for this investment was approximately \$375 million.

the "Refurbishment") based upon an agreed scope of work and timetable and in accordance with good engineering practices. We also understand that, in connection with the Refurbishment:

- i) the Supplier has agreed to refurbish and restart Units 1 and 2, to provide an estimated 1,500 MW of rated generation capacity for approximately 25 years from targeted commencement of operation in 2009;
- ii) the Supplier has agreed to refurbish Unit 3, with project commencement targeted for 2007, to provide an estimated 750 MW of rated generation capacity for approximately 25 years from targeted re-commencement of operation in 2012; and
- iii) the Supplier has agreed to replace the steam generation equipment of Unit 4, to provide an estimated 750 MW of rated generation capacity for approximately 8 years from targeted re-commencement of operation in 2008.

We also understand that the Technical Advisor has reviewed the scope of work and project management plans and has advised the MOE in its report that the Supplier has identified the material project risks and structured a project management plan to effectively monitor, manage and mitigate these risks. We understand that the Supplier has negotiated numerous contracts relating to the Refurbishment with several qualified engineering and construction firms and that many of these are structured as fixed-price contracts. We understand that the Supplier has estimated that the Refurbishment will cost in excess of \$4 billion and that it represents one of the most significant investments in electricity generation undertaken in the Province.

We also understand that the Agreements entitle the Supplier to a specified selling price in respect of actual Bruce A electricity generation³ for the full term of the Agreements⁴ (the "Contract Price"). The initial Contract Price will be \$63.00 per MWh (based on a \$57.37 per MWh base price and an estimate in respect of a Fuel Pass-Through, as defined below), subject to an annual adjustment in respect of the Ontario consumer price index ("CPI"), an agreed upon sharing of the differences between actual and estimated Refurbishment costs and differences between actual and forecast staffing costs related to certain common Facility functions at the time of decommissioning of Bruce B. Accordingly, we understand that if the Supplier receives a selling price from the sale of electricity to the Market that is in excess of the Contract Price, the Supplier is required to pay such excess to the OPA (the "Revenue Sharing Payment"). Conversely, we understand that, if the Supplier receives a selling price from the sale of electricity to the Market that is below the Contract Price, the OPA is required to reimburse such difference to the Supplier⁵ (the "Contingent Support Payment" and together with the Revenue Sharing Payment, the "Contract Payments"). The Contract Payments are determined with reference to defined

³ In certain defined circumstances, where the Supplier is unable to supply electricity due to transmission system inadequacy or as a result of an IESO order to curtail generation due to unutilized base-load generation, the Supplier is entitled to receive the Contract Price in respect of deemed electricity generation ("Deemed Generation").

⁴ The term of the Agreement is approximately 25 years subject to early termination and extension under certain circumstances.

⁵ Subject to a cumulative cap of \$575,000,000 prior to such time that Unit 1 and Unit 2 commence commercial operation.

Market price measures or other price measures as required⁶ and are paid on a net basis each month for the full term of the Agreements.

We also understand that, pursuant to the Agreements, in addition to the Contract Price, the Supplier is entitled to reimbursement from the OPA of all reasonable costs related to the procurement of nuclear fuel supply used in the generation of Bruce A electricity (the "Fuel Pass-Through"). The Fuel Pass-Through will be paid on a monthly basis by the OPA to the Supplier and is subject to certain OPA review rights to ensure that the Supplier is procuring its nuclear fuel supply in accordance with practices mutually agreed to by the Supplier and the OPA.

We understand that the Agreements do not provide for any annual capacity payments or any other fixed amount in respect of the Supplier's investment in Bruce A and, accordingly, the OPA is only obligated to make Contingent Support Payments, where applicable, in respect of Bruce A's actual electricity generation and, in certain defined circumstances, Deemed Generation.

We also understand that the initial Contract Price is the result of negotiations between the MOE and the Supplier, and is intended to provide the Supplier with an agreed-upon target annual internal rate of return (the "Target IRR"), as measured in the Financial Model, under the mutually agreed-upon set of Base Case operating and financial assumptions. The actual internal rate of return ("IRR") earned by the Supplier will depend upon the actual financial and operating performance of Bruce A and other factors. We have advised the MOE that the actual performance of Bruce A will differ from the Base Case forecast performance and that the differences, either positive or negative, may be material. Accordingly, the actual IRR earned by the Supplier will be either higher or lower than the Target IRR and the difference may be material. Several factors may contribute to such differences, including, among other things, changes in: (i) the Supplier's actual Refurbishment costs; (ii) the actual electricity generation volumes of Bruce A; and (iii) the Supplier's actual operating costs.

We understand that the Contract Price will be subject to certain adjustments, both positive and negative, in respect of changes in the CPI by an amount equal to (i) CPI where CPI is between 0% and 2.5%; (ii) 2.5% plus 60% of the excess of CPI over 2.5% where CPI is in excess of 2.5%; and (iii) 60% of CPI where CPI is less than 0%.

We further understand that the Contract Price will also be adjusted in respect of differences between actual and estimated Refurbishment costs based upon defined sharing bands that are intended to allocate such variance, either favourable or unfavourable, between the Supplier and the OPA. Any variance, other than a variance that is attributable to a *force majeure* event, is allocated 50% to the Supplier and 50% to the OPA, to an agreed upon threshold, and then 75% to the Supplier and 25% to the OPA beyond that threshold ("General Cost Sharing")⁷. Where a Refurbishment cost variance is the result of a *force majeure* event, the sharing arrangements are dependent

⁶ The Agreement provides for Market evolution and circumstances where the Market price is unavailable.

⁷ The OPA will share in 50% of the cost overruns up to approximately 111% of the Base Case for Units 1 & 2 and 25% thereafter; the OPA will share 50% of the cost overruns up to approximately 125% of the Base Case for Unit 3 and 25% thereafter.

upon the underlying nature of the *force majeure* event with "Type I" variances being allocated 25% to the Supplier and 75% to the OPA; "Type II" variances being allocated 50% to the Supplier and 50% to the OPA; and "Type III" variances being allocated to the Supplier and the OPA in accordance with the General Cost Sharing arrangements. Actual Refurbishment costs will be subject to certain OPA review and audit rights as described in the Agreements. Any Refurbishment cost variance allocated to the OPA (the "OPA Variance") will result in an adjustment to the Contract Price⁸ equal to an amount that amortizes the OPA Variance, based on the Base Case assumptions, including an amount in respect of the Target IRR, over the remaining Base Case forecast volume of electricity generation from the date of adjustment to December 31, 2036. We have advised the MOE that the actual recovery of the OPA Variance may not equal the intended recovery as a result of differences between assumed and actual electricity generation and CPI.

We understand that the Agreements also require the Supplier to pay to the OPA, commencing in 2010, a portion of the annual benefit realized by the Supplier in respect of achieving lower than Base Case forecast operating costs per MWh (the "Operating Efficiency Amount"). The OPA will be entitled to receive 50% of the Operating Efficiency Amount to an agreed upon threshold and then 25% to a second threshold, after which the OPA is no longer entitled to share in the Operating Efficiency Amount. Any amounts paid to the OPA will not be recoverable by the Supplier in a subsequent period where actual operating costs per MWh are higher than the Base Case forecast.

We understand that, under the terms of the Agreements, the OPA will be entitled to receive specified liquidated damages payments in the event that the Supplier is unable to achieve commercial operation of each refurbished Bruce A Unit prior to 3 months following agreed upon milestone dates⁹. Further, if the Supplier is unable to commence commercial operation of Unit 1 and 2 prior to a specified date, the OPA will be entitled to claw-back a portion of any Contingent Support Payments and, if the Supplier is unable to achieve commercial operation of Unit 1 and Unit 2 prior to 33 months¹⁰ from the milestone date, then each party has the right, but not the obligation, to terminate the Agreements.

We also understand that, under the terms of the Agreements, Bruce Power L.P. will be entitled to a minimum selling price in respect of actual Bruce B electricity generation¹¹ for each year prior to and including 2019 (the "Bruce B Floor Price"). The initial Bruce B Floor Price will be \$45.00 per MWh, and is subject to adjustment in respect of CPI in the same manner as the Contract Price. Accordingly, if Bruce Power L.P. receives a selling price from the sale of electricity to the Market that is below the Bruce B Floor Price, the OPA will be required to reimburse such deficiency to Bruce Power L.P. (the "Bruce B Contingent Support Payment"). The Bruce B Contingent Support Payments will be

⁸ The Contract Price is increased in respect of any unfavourable variance allocated to the OPA and decreased in respect of any favourable variance allocated to the OPA.

⁹ Each Bruce A Unit has a specified milestone date that is 3 months later than the target date for commencement of commercial operation (or, in the case of Unit 3 and 4, re-commencement of commercial operation), subject to extension in respect of certain force majeure events.

¹⁰ The 33 months can be extended to 48 months in respect of Force Majeure events.

¹¹ In certain defined circumstances where the Supplier is unable to generate electricity due to transmission system inadequacy or as a result of an IESO order to curtail generation due to unutilized base-load generation the Supplier is entitled to receive the Contract Price in respect of deemed electricity generation.

determined with reference to the same Market price measures that are used to determine the Contract Payments in respect of the Bruce A electricity generation. The OPA will be entitled to recapture any Bruce B Contingent Support Payments, to the extent Bruce Power L.P. subsequently realizes selling prices that exceed the Bruce B Floor Price¹².

Under the terms of the STAR, any transfer of an interest in the Supplier prior to 2012, other than between TransCanada, OMERS or any of their wholly owned affiliates, is subject to the OPA's prior consent. Subsequent to 2012, any transfer will require the OPA's consent only if, at the time of the transfer, the Supplier is a defaulting party under the Agreements or the Supplier, the transferee, or its ultimate parent, is not rated at least one notch above investment grade by two or more credit rating agencies. Further, the STAR provides for the Partners or the Supplier to make a payment to the OPA equal to 50% of the financial return in excess of a specified IRR of 20% (the "Windfall Sharing Payment") as a result of any Refinancing or Transfer, as such terms are defined in the STAR, of the Partners' interest in the Supplier¹³.

Our General Approach to Analysis

In setting the key financial terms of the Proposed Transaction, we understand that the MOE and the Supplier have negotiated terms that allow the Supplier to earn the Target IRR under the Base Case assumptions. The Financial Model calculates, among other things, an estimated IRR (the "Estimated IRR") using a forecast of the Facility's unlevered free cash flows under either the Status Quo Business Plan or Pro Forma Business Plan, and in each case taking into account a specific set of financial, operating and other assumptions. The Estimated IRR is equal to the Target IRR under the Base Case assumptions, which assumptions have been deemed acceptable by the Supplier and the MOE, after considering the information available to them and receiving advice from their respective legal, financial and technical advisors.

In the case of the Proposed Transaction, the Estimated IRR is calculated using incremental unlevered cash flows ("Incremental Cash Flows"), which are equal to the difference between the Supplier's forecast unlevered cash flows under the Pro Forma Business Plan and the Status Quo Business Plan, for any given set of assumptions. This calculation methodology isolates the forecasted impact of the Proposed Transaction on the Supplier's unlevered free cash flow and, accordingly, allows for the calculation of the an Estimated IRR under various scenarios, in each case, after giving effect to the completion of the Proposed Transaction.

CIBC World Markets compared the Target IRR, as well as a range of forecast Estimated IRRs under alternative scenarios, to its estimate of the Supplier's weighted average cost

¹² The recapture payment will be the lesser of: (i) the aggregate amount of Bruce B Contingent Support Payments made and not previously recaptured; and (ii) the amount by which the selling price received by Bruce Power L.P. exceeds the Bruce B Floor Price, multiplied by the generation sold at that price.

¹³ Refinancing is defined to include any refinancing undertaken by the Supplier and certain refinancings undertaken by Bruce Power L.P. or a Partner in respect of their interest in the Supplier or the Bruce Power L.P. Transfer is defined to include any direct or indirect sale of a Partner's interest in the Supplier and the determination of the Transfer Windfall Sharing Payment includes an ascribed value in respect of the Bruce B Floor Price.

of capital ("WACC"). In addition, CIBC World Markets considered other factors that it determined to be relevant, including the financial return expectations of private market investors in the infrastructure market.

Summary of Our Analysis

Determination of Weighted Average Cost of Capital ("WACC")

CIBC World Markets calculated the WACC for the Supplier based on its after-tax cost of debt and equity and an assumed capital structure using assumptions we considered reasonable.

The assumed capital structure is typically determined based upon a review and analysis of the capital structure of comparable public companies. CIBC World Markets was unable to identify a public company that is directly comparable to the Supplier. However, CIBC World Markets was able to identify several public companies that are similar to the Supplier in certain respects, including British Energy plc ("British Energy"). Accordingly, we reviewed and analyzed the capital structure of several public companies that we considered to be indirectly comparable to the Supplier, including British Energy and six other public electricity generation companies and nineteen public utilities that have some level of nuclear generation capacity. Additionally, CIBC World Markets reviewed and analyzed certain forecast credit statistics for the Supplier under the Base Case assumptions and a range of capital structures to estimate the level of debt financing that might be available to the Supplier in the private bank market and the public bond market. CIBC World Markets was unable to identify any precedent debt financing for a company directly comparable to the Supplier. Further, CIBC World Markets believes that the risk associated with the potential for Refurbishment cost overruns, the potential for the Supplier to fail in achieving commercial operation of one or more of the Units scheduled for Refurbishment, the high operating leverage inherent in the Supplier's business, the risk associated with electricity generation volumes and the negative cash flow profile of the Supplier under the Base Case assumptions during the Refurbishment are all risk factors that prospective lenders would consider in determining their willingness to lend to the Supplier. Notwithstanding these risk factors, it is our view that the Supplier would likely be capable of financing a portion of its capital structure with debt. Accordingly, CIBC World Markets has, based on its analysis, assumed that a reasonable capital structure for the Supplier, on average over the expected life of Bruce A, is comprised of between 20% and 40% debt.

In preparing our financial analysis, we calculated the after-tax cost of debt for the Supplier based on the risk-free rate of return and an estimated borrowing spread to reflect credit risk at the assumed capital structure. Based on our estimate of an appropriate borrowing spread and using an assumed tax rate of 34%, we have estimated the Supplier's cost of debt to be approximately 6.2% and its after-tax cost of debt to be approximately 4.1%.

CIBC World Markets used the Capital Asset Pricing Model ("CAPM") to determine the appropriate cost of equity for the Supplier. The CAPM approach calculates the cost of equity as a function of (i) the risk-free rate of return; (ii) the co-variance of the equity value of the Supplier relative to the variance of the broader public equity market (with

such measurement referred to as "Beta"); (iii) an equity risk premium; and (iv) an appropriate premium in respect of the size of the equity value of the Supplier. The Supplier Beta would typically be determined based upon a review and analysis of the Beta of comparable public companies. As noted above, CIBC World Markets was unable to identify a public company that is directly comparable to the Supplier but was able to identify several public companies that are similar to the Supplier in certain respects, including British Energy. Accordingly, we reviewed and analyzed the historic and forecasted Betas¹⁴ of several public companies that were considered by us to be indirectly comparable to the Supplier, including British Energy and six additional public electricity generation companies and nineteen public utilities with some level of nuclear generation capacity.

In determining an appropriate estimate for the Supplier Beta, CIBC World Markets considered several factors that could affect the Beta of the Supplier relative to the observed historic and forecast Betas of the indirect comparables, including, for example, the relative degree of operating leverage inherent in the Supplier's business. Based on its analysis, CIBC World Markets has estimated that the Beta for the Supplier would be within a range of 0.6 to 0.9.

In addition to the Supplier's Beta, CIBC World Markets considered and factored into its estimate of the Supplier's cost of equity a size premium and a premium (the "Supplier Premium") in respect of certain other factors, including certain limitations of CAPM in determining the Supplier cost of equity, such as the transfer restrictions and Windfall Sharing Payments provided for in the STAR, the sharing requirements related to the Operating Efficiency Amount, transfer restrictions prior to 2012 and the relative degree of prospective liquidity for the Partners given the size of the investment and the specialized expertise required to operate Bruce A.

Based on our estimate of the Supplier's Beta, the risk-free rate, and our estimates of the equity risk premium, size premium and Supplier Premium, CIBC World Markets has estimated the Supplier's cost of equity to be in the range of 13.7% to 18.0%.

Our estimate of the Supplier's cost of equity is consistent with our understanding of the Proposed Transaction and our understanding and experience with the private and public capital markets and the power generation and infrastructure industries. Further, we understand that our estimate of the Supplier cost of equity is consistent with Macquarie's principal investing experience in the private and public infrastructure capital markets.

Based on our estimates of a reasonable capital structure, the Supplier's after-tax cost of debt and the Supplier's cost of equity, CIBC World Markets has estimated the Supplier's WACC to be in the range of 10.6% to 13.8% (the "Supplier WACC Range").

Comparison of the Target & Estimated IRR to the Supplier WACC

The Target IRR under the Base Case assumptions falls within the Supplier WACC Range of 10.6% to 13.8%. CIBC World Markets also considered estimates of IRR under several alternative sets of assumptions, including variations from the Base Case in respect of

¹⁴ Historic and predicted Betas based on Barra and Value Line Investment Survey data.

Refurbishment costs¹⁵, and operating efficiency¹⁶. These sensitivities were based upon information provided by the Supplier, discussions with the Technical Advisor and Macquarie and certain other assumptions made by CIBC World Markets. In all circumstances, including the combination of an upside case in respect of both Refurbishment costs and operating efficiency, the resulting Estimated IRRs fall within the Supplier WACC Range.

Analysis of the Bruce B Floor Price

To analyze the Bruce B Floor Price, we have considered the stream of Bruce B Contingent Support Payments under a series of forecast electricity price curves, each of which has been assigned an estimated probability factor and the resulting probability weighted cash flows have been discounted to arrive at an expected net present value. We subsequently included this expected net present value as a positive Supplier cash flow on the closing of the Proposed Transaction, which resulted in a nominal change to the Estimated IRR that was, in all cases considered, still within the Supplier WACC Range.

Assumptions and Limitations

Our Opinion is subject to the assumptions, explanations and limitations set forth below.

We have not been asked to prepare and have not prepared a valuation or appraisal of Bruce A or any of its assets and our Opinion should not be construed as such. We have not been asked to identify or provide any advice or financial analysis regarding any potential alternative to the Proposed Transaction and our opinion should not be construed as an opinion to the fairness, from a financial point of view or otherwise, of the Proposed Transaction relative to any such potential alternative.

Our financial analyses considered, among other things, whether the principal financial terms of the Proposed Transaction, when taken together and considered as a whole, implied a commercially reasonable financial return on investment for the Supplier.

We are not experts about electricity generation, transmission or markets. With your permission, we have relied upon and have assumed to be correct information provided to us by the MOE regarding the Market's need for the electricity expected to be generated by the Facility upon completion of the Proposed Transaction and the capability of the electricity transmission and distribution network to transmit and distribute all of the electricity to be generated by the Facility after completion of the Proposed Transaction.

With your permission, we have relied upon, and have assumed the completeness, accuracy and fair presentation of all financial and other information, data, advice, opinions and representations obtained by us from public sources, or provided to us by the MOE and its legal counsel, the Supplier and its legal counsel, the Technical Advisor or

¹⁵ Reflected in the Financial Model as an adjustment to the Refurbishment costs with the associated adjustment made to the Contract Price with the upside case equal to 90% of Base Case Refurbishment costs and the downside case being equal to 130% of Base Case Costs.

¹⁶ Reflected in the Financial Model as an adjustment to the electricity generation forecast, and based on discussions with the Technical Advisor, the upside case is equal to 102.5% of Base Case electricity generation and the downside case is equal to 95% of Base Case electricity generation.

otherwise obtained pursuant to our engagement, and our Opinion is conditional upon such completeness, accuracy and fair presentation. We have not been requested or attempted to verify independently the accuracy, completeness or fairness of presentation of any such information, data, advice, opinions and representations. With respect to operating and financial forecasts provided to us and relied upon in our analysis, we have assumed that they have been reasonably prepared on bases reflecting the most reasonable assumptions, estimates and judgments of the Supplier's management, having regard to the Supplier's plans, financial condition and prospects. We have also assumed that the Proposed Transaction will be completed substantially in accordance with the Agreements.

Without limiting the preceding paragraph, with your permission, we have relied upon the Financial Model in preparing this Opinion. The Financial Model relies, in turn, upon a number of key financial and operating assumptions including, but not limited to, the amount and timing of capital expenditures related to the Refurbishment and maintenance of Bruce A, electricity generation levels, annual cash operating costs, forecast electricity prices in the Market, the amount and timing of Contract Payments, and the amount and timing of capital cost allowance amounts available to the Partners. Further, the Financial Model reflects an assumption that the Supplier is a taxable corporate entity, notwithstanding its legal tax status as a limited partnership, and, accordingly, an estimate in respect of income taxes has been made as a deduction from the forecast cash flows in the Financial Model. We understand that the Technical Advisor has advised the MOE as to the reasonableness of certain assumptions reflected in the Base Case Financial Model and we have not been requested or attempted to assess or verify independently any of the assumptions. If any assumption in the Financial Model proves to be incorrect, the actual financial results of the Supplier, including the Supplier's actual IRR, will differ from the forecast financial results, including the Estimated IRR reflected in the Financial Model, and any material difference would affect the financial fairness of the Proposed Transaction.

The MOE has represented to us, in a certificate signed by two senior officers of the MOE and delivered as at the date hereof, among other things, that the information, opinions and other materials provided to us by or on behalf of the MOE and the Supplier, including the written information and discussions referred to above under the heading "Scope of Review" (collectively, the "Information"), are complete and correct at the date the Information was provided to us and that since the date of the Information, there has been no material change, financial or otherwise, in the financial condition, assets, liabilities (contingent or otherwise), business, operations or prospects of the Facility and no material change has occurred in the Information or any part thereof which would have or which would reasonably be expected to have a material effect on the Opinion.

We have not conducted any investigation concerning the financial condition, assets, liabilities (contingent or otherwise), business, operations or prospects of the Supplier or any of the Partners.

Our Opinion is rendered on the basis of securities markets, economic and general business and financial conditions prevailing as at the date hereof and the conditions and prospects, financial and otherwise, of the Supplier as they are reflected in the Information and as they were represented to us in our discussions with the Supplier's

CIBC WORLD MARKETS INC.

management and legal counsel. In our analyses and in connection with the preparation of our Opinion, we made numerous assumptions with respect to industry performance, general business, market and economic conditions and other matters, many of which are beyond the control of any party involved in the Proposed Transaction.

In providing this Opinion, we are not opining on any specific term of the Agreements, the Lease Amendment or a particular element of the Proposed Transaction but are providing our opinion on the principal financial terms of the Proposed Transaction, when taken together and considered as a whole, based upon the information available to us at the date hereof.

The Opinion has been provided to the MOE for its use only in connection with considering the financial merits of the Proposed Transaction and may not be relied upon by any other person or for any other purpose without the prior written consent of CIBC World Markets.

The Opinion is given as of the date hereof and, although we reserve the right to change or withdraw the Opinion if we learn that any of the information that we relied upon in preparing the Opinion was inaccurate, incomplete or misleading in any material respect, we disclaim any obligation to change or withdraw the Opinion, to advise any person of any change that may come to our attention or to update the Opinion after today.

Opinion

Based upon and subject to the foregoing and such other matters as we considered relevant, it is our opinion, as of the date hereof, that the principal financial terms of the Proposed Transaction, when taken together and considered as a whole, are fair, from a financial point of view, to the OPA.

Yours truly,

CIBC World Markets Inc.