Ontario Energy Board | Commission de l'énergie de l'Ontario

Ontario

BY E-MAIL

May 1, 2026

Mr. Ritchie Murray
Acting Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4
Registrar@oeb.ca

Dear Ritchie Murray:

Re: Ontario Power Generation Inc. (OPG) and DNNP LP (the Applicants)
2027-2031 Payment Amounts
Ontario Energy Board (OEB) File Number: EB-2025-0297

In accordance with Procedural Order No. 2, please find attached the Ontario Energy Board (OEB) staff interrogatories in the above proceeding. The Applicants and intervenors have been copied on this filing.

On April 22, 2026 and April 24, 2026, the Applicants filed responses to OEB staff and intervenor interrogatories. In accordance with Procedural Order No. 2, this batch of interrogatories, prepared by or in coordination with OEB staff's experts, requests additional relevant information and documentation from the Applicants, referencing prior interrogatories.

Any questions relating to these interrogatories should be directed to the Case Managers, Thomas Eminowicz, at Thomas.Eminowicz@oeb.ca and Jeffrey Sauer, at Jeffrey.Sauer@oeb.ca. The OEB's toll-free number is 1-888-632-6273.

Yours truly,

Thomas Eminowicz
Digitally signed by Thomas Eminowicz
Date: 2026.05.01 16:13:41 -04'00'

Thomas Eminowicz
Senior Advisor,
Electricity Supply

Jeffrey Sauer
Jeffrey Sauer
2026.05.01 16:11:44 -04'00'

Jeffrey Sauer
Senior Advisor,
Electricity Supply

OEB Staff Interrogatories (Clarifying IRs)
2027-2031 Payment Amounts Application
Ontario Power Generation (OPG) and DNNP LP
EB-2025-0297
May 1, 2026

Please note, the Applicants are responsible for ensuring that all documents they file with the OEB, including responses to OEB staff interrogatories and any other supporting documentation, do not include personal information (as that phrase is defined in the *Freedom of Information and Protection of Privacy Act*), unless filed in accordance with rule 9A of the OEB's *Rules of Practice and Procedure*.

EXHIBIT A – ADMINISTRATIVE DOCUMENTS

A1-03-Staff-329

Ref 1: Exhibit L / A1-Staff-285
Ref 2: EB-2016-0152 / Exhibit L / Tab 11.1 / Schedule 1 Staff-247
Ref 3: Exhibit L / F1-AMPCO-099

Preamble:

In its response to Staff-247 in the EB-2016-0152 proceeding, OPG provided data on its operation, maintenance, and administrative ("OM&A") expenses for the 2002-2015 period.

Chart 3

Hydroelectric Operations, Maintenance, and Administration Costs ($M) [iv]

Years	Operations Cost, $M	Maintenance Cost, $M	Administration Cost, $M	Project OM&A, $M	Total Plant Group Costs, $M	HTO Central Support Group Cost, $M	Corp Allocated Costs, $M	Total Costs, $M
	A	B	C	(i) D	A+B +C	(ii) (v) E	(ii), (iii) F	A+B+C+E+F
2002	13.7	85.9	18.3	24.3	117.9	26.1	56.8	200.9
2003	14.8	96.7	19.2	30.1	130.7	19.1	58.1	207.8
2004	15.4	96.3	20.5	26.1	132.2	11.2	59.7	203.1
2005	15.4	106.0	21.0	30.1	142.4	15.8	65.4	223.6
2006	16.9	115.1	24.6	34.3	156.6	20.1	84.9	261.6
2007	17.5	123.2	24.3	33.4	165.0	19.8	94.7	279.4
2008	18.1	142.6	25.1	41.6	185.7	22.3	96.3	304.3
2009	20.4	133.9	30.8	33.5	185.1	28.5	85.2	298.8
2010	17.8	142.5	24.4	45.1	184.7	23.1	90.6	298.4
2011	17.6	129.0	28.0	28.4	174.6	24.4	93.5	292.5
2012	17.4	135.9	24.9	34.1	178.1	16.5	110.1	304.8
2013	19.2	138.7	24.7	34.6	182.6	17.2	111.1	310.9
2014	21.0	145.2	21.8	37.7	188.0	20.7	126.0	334.7
2015	21.2	161.7	27.3	52.3	210.2	32.2	140.0	382.4

Notes:
(i) Project OM&A is provided for information only. It is a subset of Maintenance Costs (Column B).
(ii) Classification between Operations, Maintenance, and Administration is not available for HTO Central Support Group and Corporate Allocated Costs.
(iii) Corporate Allocated Costs includes Corporate Support Services, Centrally Held Costs, and Asset Service Fees. IESO non-energy charges are excluded.
(iv) Includes data for currently regulated stations, as well as certain other stations for periods prior to becoming contracted or divested by OPG. First Nations provision funding amounts are excluded from Plant Group OM&A costs.

OPG provided more recent data on its OM&A expenses in response to A1-Staff-285.

Filed: 2026-04-24
EB-2025-0297
Exhibit L
A1-Staff-285
Attachment 1

Numbers may not add due to rounding.

L-A1-Staff-285 - Attachment 1
OM&A - Regulated Hydroelectric
Total Hydroelectric Operation, Maintenance, and Administration (OM&A) 2016-2027 ($M)

Year	Operations Cost	Maintenance Cost	Administration Cost	Project OM&A [1]	Total Operating Region Costs	Support Costs [2]	Corporate Allocated Costs [2,3]	Total Costs
	(a)	(b)	(c)	(d)	(a)+(b)+(c)	(e)	(f)	(a)+(b)+(c)+(e)+(f)
2016	20.9	152.9	20.5	38.3	194.3	49.8	90.9	335.0
2017	21.4	159.3	17.6	42.2	198.3	52.0	72.5	322.8
2018	22.6	165.2	16.7	53.8	204.5	54.9	77.5	336.9
2019	21.5	164.8	16.8	54.3	203.1	54.6	78.3	335.9
2020	22.3	161.8	18.5	52.8	202.6	54.6	60.5	317.8
2021 [4]	23.2	183.1	17.2	71.6	223.5	53.5	76.9	353.9
2022	25.1	191.7	17.6	74.0	234.4	55.0	58.7	348.2
2023	27.7	207.3	18.1	75.1	253.0	58.6	43.8	355.4
2024	27.8	212.3	17.0	67.9	257.0	62.1	75.4	394.4
2025	30.5	215.1	16.9	71.9	262.5	65.4	72.5	400.4
2026 Budget	30.3	240.8	21.7	86.7	292.7	68.1	71.8	432.6
2027 Plan	31.8	281.3	23.3	123.3	336.5	73.1	83.1	492.7

Notes

1 Project OM&A is provided for information only. It is a subset of Maintenance Costs (column B). Project OM&A excludes costs associated with hydroelectric business development.

2 Support Group and Corporate Allocated Costs are not split between Operations, Maintenance, and Administration.

3 Corporate Allocated Costs includes Corporate Support Services, Centrally Held Costs, and Asset Service Fees. IESO non-energy charges are excluded.

4 2021 Project OM&A excludes provision of $9.5M in connection with a Final Settlement Agreement with a First Nation for shoreline erosion.

5 Operations, Maintenance, Administrative, and Total costs are comparable to pre 2016 levels. Support and Corporate allocations are not comparable due to organizational changes - refer to Ex. L-F1-AMPCO-099.

Question(s):

a) PEG wishes to undertake benchmarking and productivity calculations in years before 2016.
   i. Are the older OM&A data still valid and comparable to what has been provided in response to A1-Staff-285? For this purpose, PEG is mainly concerned with the values in columns A-D. If not, please provide the same data requested in A1-Staff-285 for at least the 2010-2015 period. This will allow PEG to calculate 15-year productivity trends and benchmarking results for OPG.

ii. PEG understands that the pre-2016 data may not be fully comparable due to restructuring. However, PEG believes that the items that cause the inconsistency (e.g., support and corporate allocated costs) might be amenable to removal from cost, with the rest being consistent. If this is not the case, please explain what other inconsistencies exist and the impact on the OM&A expense data.
iii. Please provide an explanation or reference to a document that describes in more detail the types of cost included in Support Costs and Corporate Allocated Costs.

b) How does the definition of OM&A cost for OPG differ between the LEI TFP study and the LEI benchmarking study?
c) In the response to part a subsection vii of A1-Staff-285, OPG indicated that about 60% of the OM&A cost for the hydroelectric operations is labor related. To make a fair comparison to US companies, PEG may wish to remove A&G, support, and corporate costs (i.e. columns C, E, and F) from OPG OM&A. Is this 60% ratio also a reasonable value to use for the hydroelectric generation O&M (i.e., columns a and b of attachment 1)? If not, please provide an estimate that would be more reasonable for that part of cost.
d) To improve the comparability with US data, PEG wishes to know where non-salary labour costs are included in the data provided.
   i. Which columns of Attachment 1 and Chart 3 from EB-2016-0152 Exhibit L, Tab 11.1, Schedule 1, Staff-247 include pension and benefit expenses?
   ii. If pensions and benefit expenses are included in columns A and B of attachment 1 and chart 3, please provide the amounts for each year 2010-2025. Separate itemization for columns A and B is not necessary. If pensions and benefit expenses are in column C, please provide the amounts for 2010-2025.
   iii. Where are payroll taxes included (if at all) in columns A-F of A1-Staff-285 Attachment 1 and chart 3?
   iv. If any payroll taxes are in columns A-C of A1-Staff-285 Attachment 1, please provide the amounts for each year 2010-2025 for columns A+B and column C.
e) Please confirm that the data provided in A1-Staff-285 Attachment 1 and in Chart 3 from the response to Staff-247 in EB-2016-0152 exclude water for power or gross revenue charges. If not confirmed, please provide itemized water for power or gross revenue charges for each year of the 2010-2025 period.
f) In its response to F1-AMPCO-099, OPG objected to providing 2014 and 2015 data on OM&A costs, compensation and benefits details, and staffing information for the regulated hydroelectric business on the grounds that they were not comparable to more recent data due to changes in OPG's organization and cost

structures. Please discuss these changes and explain their impact on OPG's cost reporting.

g) Please provide the approximate percentage of total hydroelectric property plant and equipment that is related to transformers used to step up voltage to transmission voltage. Has this proportion significantly changed since 2010 and in which direction? If readily available, please provide the gross plant value associated with these assets or a similar group of transmission assets dedicated to hydroelectric operations from 2010-2025

A1-03-Staff-330

Ref 1: Exhibit L / A1-Staff-285
Ref 2: Ontario Regulation 395/11

Preamble:

In this response, OPG provides data that other parties can use to appraise its cost performance. In part a) iv. of this response OPG states that "OM&A and Total costs are comparable to pre-2016 amounts. Support Group and Corporate Allocated costs are not comparable to pre-2016 amounts due to organizational changes."

Question(s):

a) In part a) i. of its response to A1-Staff-285, OPG provides the 2016-2025 values of gross additions to hydroelectric plant. Please confirm that OPG believes that the 2016-2025 plant additions data are consistent with those provided in EB-2016-0152.
b) Please discuss any changes in capitalization policy that would affect the capitalization of overheads in the years since 2000. Do any such changes on balance result in more or less overheads being capitalized?
c) Ontario Regulation 395/11 required OPG to prepare its financial statements in accordance with US generally accepted accounting principles ("GAAP") for all financial years beginning on or after January 1, 2012. Please discuss the impact on the reported OM&A expense and plant data of this switch in accounting standards.

A1-03-Staff-331

Ref 1: Exhibit L / A1-Staff-004
Ref 2: Exhibit A1 / Tab 3 / Schedule 2 / pp. 11, 18-19

Preamble:

In its response to A1-Staff-004 OPG provided its calculation of the 2027 Inflation Factor based on actual data from Statistics Canada. The 2027 inflation factor value was 2.9% based on actual inflation. In its application, OPG assumed that the 2027 inflation factor would be 3.49%.

Question(s):

a) Is OPG proposing to change its C-Factor proposal to reflect the change in the value of the 2027 Inflation Factor and other new developments?
b) Please update the C factor to reflect the revised Inflation Factor and any other new developments, such as those that have arisen from other interrogatory responses or evidence updates.

A1-03-Staff-332

Ref 1: Exhibit L / A1-CCC-006
Ref 2: Exhibit A1 / Tab 3 / Schedule 2 / Attachment 1 / pp. 10, 16
Ref 3: EB-2025-0252 / Exhibit 1 / Tab 11 / Schedule 2 / pp. 11-12
Ref 4: EB-2025-0312 / Exhibit 1 / Tab 5 / Schedule 1 / p. 13

Preamble:

In the cited interrogatory, OPG was asked to provide the labour and non-labour weightings for an inflation factor based on OPG-specific data rather than an industry average. LEI responded that calculating an inflation factor based on OPG-specific data "would not be appropriate" as the inflation factor "should be exogenous to the utility." LEI further said that "use of industry weights ensures an exogenous inflation factor that is representative of industry conditions and will provide incentives to the regulated firm consistent with the theoretical underpinnings of incentive ratemaking and an index based formula."

Question(s):

a) Two Ontario electricity distributors (Alectra and Elexicon) are currently requesting approval of input price differentials based on the difference between the share of labor expenses in OM&A and total cost.
   i. Please confirm that these calculations are based on company-specific cost shares.
   ii. Does LEI believe that these proposals would result in input price differentials that are insufficiently exogenous?
   iii. Please also discuss if LEI believes that such adjustments are "consistent with the theoretical underpinnings of incentive ratemaking and an index-based formula."
b) Does LEI believe that using a non-transparent data source such as EUCG to support its inflation factor calculations meets all of its criteria for inflation factor design?
   i. If yes, please explain your rationale.
   ii. If no, please identify which criteria are missed and explain your rationale.
c) Please provide the share of labor in OPG's total cost and OM&A expenses so that parties can better ascertain whether the use of industry cost shares, some of which are drawn from a non-transparent data source, unduly favor the Company.
d) Please provide the calculations that support LEI's proposed weights of 15.3% for labour inflation, 9.3% for non-labour inflation, and 75.4% for capital inflation.

A1-03-Staff-333

Ref 1: Exhibit L / A1-CCC-008

Preamble:

In A1-CCC-008 part f, OPG refused to provide the percentage of sustaining capital investments as a percentage of the Company's own total hydroelectric capital investments for each year of the study period on the grounds that this data was subject to a non-disclosure agreement.

Question(s):

a) Are the data OPG provided to EUCG confidential for the purposes of this proceeding? If yes, why is this the case? If no, please provide the percentage of

sustaining capital investments as a percentage of OPG's total hydroelectric capital investments for each year of the benchmarking sample period.

A1-03-Staff-334

Ref 1: Exhibit L / A1-EP-003
Ref 2: Exhibit A2 / Tab 2 / Schedule 1 / Attachment 1 / p. 37
Ref 3: Exhibit I1 / Tab 2 / Schedule 1 / p. 1
Ref 4: EB-2025-0252, Exhibit 1 / Tab 11, Schedule 2, pp. 8-15

Preamble:

In response to part b of this question, OPG said that a "typical price cap framework cannot fund capital investment when the capital related revenue provided through annual (I-X) adjustments is less than the forecast capital-related revenue requirement over the period."

OPG did not fully respond to parts c and d of Ref 1.

Ref 2 shows that OPG forecasts its hydroelectric generation to grow by roughly 400,000 MWh excluding surplus baseload generation losses during the term of the Custom IR plan.

Question(s):

a) Does OPG believe that the growth in volumes does not provide funding for capital under a price cap framework? Please explain your answer.
b) Please confirm that the growth in OPG's forecasted volumes during the Custom IR plan term will lead to increased reviews in each year of the 2028-2031 period relative to 2027. For example, at OPG's requested 2027 Hydroelectric Payment Amount ($51.39/MWh) volume growth will lead OPG to receive an additional $20,556,000 in revenues during the final year of the Custom IR plan term over the test year level. If not confirmed, please explain why this value is not confirmed and provide the correct amount for 2031 using OPG's proposed 2027 Hydroelectric Payment Amount.
    i. Please discuss where, if at all, this increase in OPG's revenues from volume growth is considered in the proposed attrition relief mechanism.

c) In its CIR proposal in EB-2025-0252, Alectra Utilities considers future growth in billing determinants in the design of its proposed price cap index. Why is an adjustment of this kind not appropriate in the price cap index of OPG?

A1-03-Staff-335

Ref 1: Exhibit L / A1-Staff-279

Preamble:

In part e of this response LEI states:

> However, we requested that OPG provide its OM&A data in a manner consistent with the FERC Form 1 accounts listed above in response to part (d) of this IR. LEI also compared the updated data provided by OPG (i.e., for the 2015-2023 period) to the prior data received and used in LEI's 2016 TFP Study (for the 2002-2014 period) to check for anomalies and alignment across the entire study timeframe.

Question(s):

a) Were any anomalies found in OPG's data? If so, what adjustments did LEI make to the data to account for these anomalies?

A1-03-Staff-336

Ref 1: Exhibit L / A1-Staff-278

Preamble:

In part b of its response, LEI explains that generation MWh is the "measure of output" for their TFP study and seem to specifically not consider it to be a scale variable. LEI goes on to describe the use of MW capacity in the econometric model, adding that "LEI understands that EUCG also controls for plant capacity (not generation) in its benchmarking analysis to reflect economies of scale in costs."

In part d, LEI confirms that it recently used customers as the output metric in a gas distribution TFP study and go on to state that that choice is not applicable to OPG because hydro generation and gas distribution are “entirely different business[es].”

Question(s):

a) Isn’t the volume of an energy distributor’s deliveries just as important to its mission as the volume of a power generator’s sales to its mission?
b) Please confirm that the failure of an energy distributor to deliver is a closely monitored measure of its performance.
c) Please explain any differences between power generation and energy distribution that might prompt LEI not to use delivery volume as the scale variable in an energy distribution productivity study.

A1-03-Staff-337

Ref 1: Exhibit L / A1-Staff-279

Preamble:

In part b of its response, LEI refuses to provide a table with productivity calculations for OPG.

In part c, LEI clarifies that OPG’s administrative costs are included in their cost definition while those costs are not included in LEI’s cost definition for the U.S. companies, and state that the amounts are “not sizeable.”

In part f, LEI states that they use the Ontario AWE for all employees for labour prices because that is the measure used by the OEB in the past.

Question(s):

a) In subpart ii of their response to part a, LEI does not answer the question asked, perhaps misunderstanding the reference intended.
    i. In the text surrounding Figures 33 and 34, LEI says it produces similar findings to it’s 2016 study’s reported -1.18% TFP for the 2002-2014 period. The numbers presented in the current study and the supporting text both say and show that productivity after adding the 2015-2023 period is “higher” and

"less negative." Please confirm that this would in fact be "more rapid" productivity.

ii. Did LEI reproduce the 2002-2014 trends with this dataset, and were they consistent as is implied in the text? If not, please report these updated TFP estimates for that time period.

b) Does LEI believe their TFP calculations are not valid for individual distributors[1] and for OPG specifically? If so, please explain why.
c) Aren't the OM&A, capital, and total factor productivity trends of OPG useful for gauging the relevance of LEI's productivity trend research to the Company's productivity factor?
d) Please provide OPG's OM&A, capital, and total factor productivity trends.
e) Regardless of which wage rate index the OEB uses, which index does LEI believe is more accurate and appropriate for benchmarking and productivity trend research and why.

A1-03-Staff-338

Ref 1: Exhibit L / A1-Staff-282

Preamble:

In part a of their response, LEI confirms that they set all index values to 1.00 in 2013 as an "anchor value," and that the index values otherwise vary by year and country, and also by region for the ECI.

In parts c and d, LEI responds to a question about trends in cost efficiency in the econometric model and explains that benchmarking OPG's forecasted costs would be inappropriate. They claim their benchmarking model measures OPG's "relative efficiency" by comparing the firm to the "industry average" and assessing the gap between the two.

In part g, subparts i, ii, and iii LEI responds to questions about OPG's observations in the econometric model data.

Question(s):

[1] Please note that there was and is no suggestion that individual firm productivity be used as a substitute for industry productivity measurement.

a) In part a, LEI confirms that that *growth* rates of the indexes vary by year and country, and additionally by region in the case of the ECI, but the answer does not indicate whether index *levels* at any point in time were adjusted by region. Please confirm that any differences in the input price index values of sampled U.S. distributors are due solely to differences in measured inflation.
b) Please confirm that the econometric models use panel data which, by definition, cause the estimates of the model standard errors exhibit heteroskedasticity, severe serial correlation, and spatial correlation. If confirmed, please explain why the non-robust p-value has any meaning at all.
c) Please confirm that there are well-established approaches to benchmarking that can measure the change in a company's cost efficiency over time and the efficiency inherent in cost forecasts.
d) Please clarify whether LEI claims that OPG's portion of the observations used to estimate the model does not affect the model parameters and the efficiency rankings which result.

A1-03-Staff-339

Ref 1: Exhibit L / A1-Staff-284

Preamble:

Regarding Ref 1, in part a of its response, LEI states the OM&A price variable is negative but not statistically significant. In part b they state the OM&A price variable is not significant in either model and should thus be interpreted as not different from zero. In part c, LEI confirms they did not log the price index variables. In part d) LEI evaluates the trend variable coefficients using the p-values, and states the magnitude of the trend variable should thus be interpreted as not different from zero. In part e) they discourage using the result for any productivity application.

Ref 2 pertains to LEI's econometric model sample and assumptions.

Question(s):

a) To clarify, is LEI claiming that they have demonstrated empirically that there was no relationship between OM&A costs and OM&A prices for the 2020-2023 period for this sample?

b) Did LEI test a model with logged price variables? If so, were the results more plausible?

A1-03-Staff-340

Ref 1: Exhibit L / A1-Staff-286

Preamble:

In subpart i of part a, LEI provides a sizeable list of other available variables, stating that they "generally found that they were not statistically significant" and were excluded on this basis. In subpart ii, LEI does not answer the specific question about testing a generation volume variable but instead points to the previous general answer.

Question(s):

a) While we understand LEI's characterization of the "general" performance of these other variables, please clarify whether any of these variables or combinations of variables tested were found to be statistically significant? Please report their reason for exclusion from the featured model
b) Which variables were not considered in econometric runs?
c) Please confirm that by this response, LEI intends to specifically communicate that generation volume was tested in both models and was found to be statistically insignificant in both.
d) Please confirm LEI's testing was all done with the same non-robust estimation methods as used in their featured models.

A1-03-Staff-341

Ref 1: Exhibit L / A1-Staff-288

Preamble:

In subpart i of part a, LEI responds that they "used the capacity as reported in the EUCG database" in the econometric model while also excluding the capital investments related to that capacity from the econometric sustaining capital cost definition. In subpart ii LEI states they do not use the Handy-Whitman indexes in their capital price,

citing the need for “sufficient variability” in the model, a challenge which is fulfilled by their chosen capital price.

Question(s):

a) Please confirm our understanding: does this mean that LEI uses the total capacity in MW as a scale variable in the econometric model, but excludes the capital costs associated with improvements to and expansion of that existing capacity?
b) How many of the 6 Handy Whitman regions do the sampled utilities fall into?
c) Why could LEI not use regional Handy Whitman indexes and make an adjustment for US vs. Canada prices? Does LEI believe doing so could introduce more variation and more accuracy into the data compared to their chosen methodology?

A1-03-Staff-342

Ref 1: Exhibit L / A1-Staff-291
Ref 2: Exhibit L / A1-Staff-282
Ref 3: Exhibit L / A1-Staff-288, part a)

Preamble:

In its response to part c of Ref 1 LEI and the Applicants state their belief that the econometric benchmarking “total cost” model proves OPG is a top quintile cost performer relative to its peers, and that this result should be used to decide the Applicant’s stretch factor for several applications.

Question(s):

a) Is LEI’s assessment dependent on the assumption that OPG’s performance does not measurably affect the model parameters used to benchmark OPG’s performance? Please explain.

A2-02-Staff-343

Ref 1: Exhibit L / A2-CCC-015

Preamble:

OPG's internal analysis was informed by an independent view of construction cost escalation by Kroll Canada Ltd.

Question(s):

a) Did OPG or Kroll consider the econometric forecasts of electric utility construction cost trends that are available from S&P Global's Power Planner service?
b) If yes, what were the results?
c) Did Kroll provide econometric construction cost inflation forecasts or instead base its analysis chiefly on the recent rapid construction cost inflation and then assume a gradual convergence to a long term trend?
d) What is the basis for the long term trend and the rate of convergence to that trend?
e) Please confirm that utility construction cost growth is volatile, and rapid growth for several years has often been followed by much slower growth in the following several years.
f) Did OPG consider making its proposed capex contingent on a specific inflation assumption subject to a true up to actuals? If yes, why did it not propose this?

A1-03-Staff-344

Ref 1: Exhibit L / A1-Staff-280
Ref 2: Exhibit L / A1-Staff-277

Preamble:

LEI did not provide a complete answer to question g) in Ref. 1. This question pertained to problems with the use of one hoss shay in other studies that LEI has undertaken.

Question(s):

a) Please confirm that LEI obtained implausible results using Handy Whitman Indexes and a one hoss shay capital cost specification and was compelled to instead use a producer price index.

b) Which of LEI's studies in the public domain were affected?
c) Please confirm that this is the source of the typographical error that LEI confirmed in its response to A1-Staff-277.

A1-03-Staff-345

Ref 1: Exhibit A1 / Tab 3 / Schedule 2 / pp. 31-32
Ref 2: Exhibit L / A1-CCC-005

Preamble:

At Reference 1, OPG states "As shown in Chart 16 below, ScottMadden's econometric analysis concludes that the TGC/MWh of Darlington over the 2021-2023 historic period was $39.58, once the impacts of the DRP and planned outages are accounted for. This performance puts the station in the median or third quintile of the Electric Utility Cost Group ("EUCG") peer group. Accordingly, OPG proposes a nuclear stretch factor of 0.3% based on the range of stretch factors set out by the OEB in the RRF."

At Reference 2, for the purpose of determining the stretch factor, OPG confirms that "The relevant chart is the final chart in Ex. F2-1-1, Attachment 4 that reflects all adjustments applied (i.e., econometric adjustments, refurbishment adjustment, and outage normalization). This chart presents the fully normalized TGC/MWh results and is the basis for the benchmarking comparison used in determining the proposed nuclear stretch factor in Ex. A1-3-2, Section 3.2."

Question(s):

a) The "relevant chart" described in Reference 2 shows Darlington's TGC/MWh is $38.11, whereas $39.58 as shown in Chart 16 corresponds to ScottMadden's analysis without accounting for the planned outages adjustment. Please confirm that OPG intended to cite the final chart on page 13 of Ex. F2-1-1, Attachment 4, rather than the chart on page 11 of Ex. F2-1-1, Attachment 4.

A1-03-Staff-346

Ref 1: Exhibit L / A1-Staff-002 / Attachment 18, SM Cost Model - With Formulas - BWR Base v4 (For OEB)
Ref 2: Exhibit L / F2-Staff-322

Question(s):

a) Please confirm that:
   i. the purpose of the refurbishment normalization as summarized in Chart 1 in Reference 2 is to remove fixed costs that have been allocated to the unit undergoing refurbishment. If this is incorrect, please explain which costs are removed from TGC.
   ii. the refurbishment normalization as summarized in Chart 1 in Reference 2 does not remove any capital expenditures (column I in tab "Raw EUCG 2023" within Reference 2) that can reasonably be attributed to the refurbishment at Darlington.
b) Please explain whether or not an adjustment for capital expenditures related to the refurbishment at Darlington should be made to TGC and if this adjustment is reflected anywhere in ScottMadden's analysis.

A1-03-Staff-347

Ref 1: Exhibit L / A1-Staff-275

Preamble:

In response to A1-Staff-275, OPG has provided hydroelectric annual capital related revenue requirement details (Table 1) and annual O&M revenue requirement details (Table 2) for 2027 through 2031.

Question(s):

a) Please provide an extension of these two annual tables including actual accounting data for 2022 to 2026, annually.

A1-03-Staff-348

Ref 1: Exhibit L / A1-Staff-293

Preamble:

In response to A1-Staff-293, OPG has provided nuclear annual capital related revenue requirement details (Table 2a) and annual O&M revenue requirement details (Table 3a) for years 2027 through 2031.

Question(s):

a) Please provide an extension of these two annual tables including actual accounting data for 2022 to 2026, annually.

A1-03-Staff-349

Ref 1: Exhibit A1 / Tab 3 / Schedule 2 / p. 30
Ref 2: Exhibit L / A1-Staff-294

Preamble:

In Reference 1, OPG states “the Application proposes that the OEB continue to exclude costs related to the major refurbishment programs from the calculation of the stretch factor”.

In Table 1 of Reference 2, OPG lists cost categories that are not subject to stretch factor.

Question(s):

a) For the line items listed in Table 1, please list those that are related to the major refurbishment programs.
b) For line items in Table 1 that are not related to the major refurbishment programs, please explain why it is appropriate to exclude them from stretch factor calculation.

EXHIBIT C – CAPITALIZATION, COST OF CAPITAL AND NUCLEAR LIABILITIES

C1-01-Staff-350

Ref 1: Exhibit L / C1-Staff-051
Ref 2: Exhibit C1 / Tab 1 / Schedule 1 / Attachment 1 / pp. 37-39

Preamble:

In response to C1-Staff-051, Concentric states: “Severe weather is also increasingly leading to regulatory directives and additional reliability standards for utilities.”

The response to C1-Staff-051 also refers to the Concentric Report (Exhibit C1-1-1, Attachment 1, pp. 37-39), which states: “In Ontario, since 2020, there have been 14 new or revised NERC Critical Infrastructure Protection (“CIP”) standards applicable to OPG requiring updates to its existing processes and the development of new initiatives to ensure compliance.”

Question(s):

a) Please provide a list of the new or revised NERC CIP standards applicable to OPG since 2020.

C1-01-Staff-351

Ref 1: Exhibit L / C1-Staff-040
Ref 2: Exhibit C1 / Tab 1 / Schedule 1 / Attachment 1 / p. 48
Ref 3: Excel File “L-C1-CCC-026_Attachment 1 CEA Exhibits – Credit Metric Analysis Workpaper.xlsx”

Preamble:

In response to C1-Staff-040, Concentric states:

“To summarize the assumptions used to generate Figure 10:

- The analysis estimates cash flow metrics based on the after-tax return on rate base at different equity ratios, adjusted for items that impact cash flow.
- Inputs to the calculations such as rate base, cost of debt, income taxes, depreciation, adjustments for other items impacting cashflow from operations (including pension/OPEB and nuclear liability related expenses and expenditures), pension & OPEB liabilities, and the pension & OPEB allocation are sourced from the OPG Exhibits in this Application as identified in the “Formula/Source” column. The formulas used to calculate various items in the analysis are also described in that column.
- A return on equity of 9.11% is assumed throughout the analysis period.

- Amounts do not reflect OPG's payment amounts shaping proposal in this Application or the availability of Clean Electricity Investment Tax Credits.
- Although a decrease from OPG's proposed equity thickness of 52% could negatively impact the cost of debt (for instance, by reducing cash flows that debt investors evaluate in their assessments of credit risk), conservatively, no assumption of such impact has been reflected in this analysis.
- As OPG's pension and OPEB liabilities are not segregated for ratemaking purposes, an allocation factor was applied to allocate a portion of OPG's pension and OPEB liabilities to the prescribed facilities consistent with the factor used to allocate OPG's pension & OPEB costs to the prescribed facilities for ratemaking purposes."

This response also references the Excel file "L-C1-CCC-026_Attachment 1 CEA Exhibits - Credit Metric Analysis Workpaper.xlsx." Please refer to rows 31, 32, 63, and 64 of this Excel file.

The FFO/Debt measure uses a measure of debt equal to:

$$Debt_{FFO\ Ratio} = Total\ Debt + (OPEB\ Liabilities + Pension\ Liabilities)$$

$$* (1 - Income\ Tax\ Rate) * Pension\ Allocation$$

The CFO/Debt measure uses a measure of debt equal to:

$$Debt_{CFO\ Ratio} = Total\ Debt + (Pension\ Liabilities) * Pension\ Allocation$$

Question(s):

a) Please confirm that the formulas in the preamble of this question accurately reflect what is displayed in this Excel spreadsheet. If this is not the case, please explain.
b) Please explain why the debt measures for FFO/Debt and CFO/Debt differ.

C1-01-Staff-352

Ref 1: Exhibit L / C1-Staff-050

Preamble:

Question C1-Staff-050(b) asks:

"Please explain why none of the companies that appear in the proxy group for the capital structure analysis were included in the sample of utilities used in the comparison of bond spreads."

The response reads:

> "As noted in footnotes 103 and 104 in Concentric's report (Ex. C1-1-1, Attachment 1, p. 51), the new credit spread analysis reflected in Figures 11 and 12 was based on data provided to OPG by Bank of Montreal, Bank of Nova Scotia, Canadian Imperial Bank of Commerce, National Bank Financial, Toronto-Dominion Bank, and Royal Bank of Canada, and thus reflects data as provided to OPG from the cited banking institutions. Based on this available data, the credit spread analysis demonstrates both that OPG is perceived from a financial perspective to be of higher risk than similarly rated utilities and further demonstrates that credit ratings alone do not fully capture investor sentiment regarding utility risk."

The purpose of the question was to understand why an analysis of capital structures and an analysis of credit ratings would require a wholly separate set of peer companies with no overlap.

In addition, all of the companies but one in this list (EPCOR Utilities Inc.) appear to have a higher credit rating than OPG.

Question(s):

a) What is meant by "similarly rated utilities"?
b) If five of the "similarly rated utilities" in the credit spread analysis have a higher credit rating than OPG, should the peer group for this analysis also contain five companies with lower credit ratings than OPG to balance the credit spread results?
c) Is a company with an S&P rating of A+ "similarly rated" to a company with an S&P rating of BBB+?
d) What value is gained by determining a credit spread using the bond yields of a particular company with the bond yields of a set of companies that have different credit ratings?
e) If the companies in the credit spread analysis are comparable to OPG, why are these companies not included in the capital structure analysis?
f) If the companies in the capital structure analysis are comparable to OPG, why are these companies not included in the credit spread analysis?