

Ontario Power Generation Interrogatory # 1

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 5

LEI states, "LEI was engaged by a large Ontario gas utility to conduct an independent capital structure review to assess the reasonableness of the utility's common equity component."

- a. Please provide the name of the large Ontario gas utility.
- b. If applicable, please provide the OEB proceeding number.
- c. Please provide a copy of LEI's report/study.
- d. What was LEI's recommended equity thickness for the large Ontario gas utility?

Response:

The following response is provided by LEI.

Given the confidentiality clause in the LEI-client services agreement, LEI cannot provide any information requested in this Interrogatory #1. To the best of LEI's knowledge, the LEI study has not been filed in a proceeding before the OEB.

Ontario Power Generation Interrogatory # 2

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 6

LEI states, "LEI staff, including Mr. Goulding, also made a presentation on the cost of capital and risk factors associated with OPG's regulated assets. [OEB Proceeding No. EB-2012-0340]." Please provide the referenced presentation.

Response:

The following response is provided by LEI.

LEI's presentation, entitled "Considering Incentive Rate Making Options for OPG's Prescribed Generation Assets", dated August 28, 2012, is attached as Exh-N_OPG-2_Att-1.pdf.

Ontario Power Generation Interrogatory # 3

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 6

LEI states, "LEI has been engaged by OEB staff (since Fall 2019) to provide quarterly updates on the macroeconomic conditions facing the utility sector in Ontario, and their potential impact on the cost of capital parameters." Please provide all quarterly updates provided to OEB staff pursuant to the referenced engagement.

Response:

The following response is provided by LEI.

Please see quarterly updates provided to OEB staff in separate attachments named Exh-N_OPG-3_Att-1.pdf through Exh-N_OPG-3_Att-7.pdf.

Ontario Power Generation Interrogatory # 4

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 14

LEI stated on page 14 that the following statement "*Rate smoothing is required by O.Reg.53/05. The OEB finds there is no real risk... that having implemented a rate smoothing plan required by regulation, the OEB would not allow OPG to recover the deferred rates*" is still a relevant conclusion. How does the LEI conclusion reconcile with Moody's Investor Services' comment on this issue based on the issuer comment issued on January 26, 2021 (Ex. L-C1-02-VECC-010)?

Response:

The following response is provided by LEI.

Unless there is evidence of non-recovery of deferred cash flows (arising due to rate smoothing), LEI believes the OEB finding remains relevant.

Ontario Power Generation Interrogatory # 5

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 15

How does LEI view the performance / operational risk of a newly commissioned asset after refurbishment and assets near their pre-refurbishment or end of life? Does the "bath-tub" curve apply to OPG's Darlington Refurbishment units that are returning to service, Darlington units reaching the end of their pre-refurbishment life, and Pickering units reaching their end of life? Should the stage of the assets be considered as part of the business risk analysis under figure 5?

Response:

The following response is provided by LEI.

Such risks are neither unknown nor unplanned for. Furthermore, the "bath-tub" curve related to the lifecycle of the assets is less important than OPG's ability to recover associated costs. OPG is entitled to significant risk mitigation under O. Reg. 53/05. This is consistent with the following OEB findings in its 2016-0152 decision:

- *"O. Reg. 53/05 provides that the OEB must accept the "need" for the DRP, so there is no risk that the OEB will find in some later proceeding that it was not required and refuse to allow it to be added to rate base... The OEB finds that given the planning, the approval of the spending in this proceeding and the regulatory protections afforded OPG, the DRP does not materially increase OPG's business risk"*¹
- *"...risks associated with Pickering Extended Operations, such as a determination that it may not proceed, and the risk of recovery of expenditures incurred in that*

¹ Ontario Energy Board. *EB-2016-0152. Decision and Order. Ontario Power Generation Inc. Application for payment amounts for the period from January 1, 2017 to December 31, 2021.* December 28, 2017. Page 105

*event are unlikely to materialize. PEO also enjoys many of the same protections as the DRP."*²

² Ibid. Page 105.

Ontario Power Generation Interrogatory # 6

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 15

LEI states that "For Ontario, the recession, and the expansionary budgets in response to the recession, may increase the potential for decline in the quality of implied provincial credit support to OPG if provincial deficits increase."

- a. If the province of Ontario's credit rating were downgraded, how would this affect the level of implied credit support provided to OPG by the Province?
- b. Would a downgrade in Ontario's credit rating be likely to result in a downgrade in OPG's credit rating?
- c. How does LEI's equity ratio recommendation for OPG take this factor into consideration?

Response:

The following response is provided by LEI.

- a. While a downgrade may not impact the actual support provided by the Province, it may influence lenders' perceptions of the province's ability to provide such support.
- b. It is possible, but not definitive. Given the current three notch difference between Province of Ontario's credit rating (A+)³ and OPG's credit rating (BBB+),⁴ strong cash flows could enable OPG to withstand a decline in the province's credit rating.

³ Ontario Financing Authority. [Province of Ontario Credit Ratings](#). 2021.

⁴ S&P Global Ratings. *Ontario Power Generation Inc. Outlook Revised To Stable From Negative; 'BBB+' Rating Affirmed*. July 17, 2020

Further, the LEI report (on page 14) acknowledges the Board's finding in the 2016-0152 decision that: "...based on OPG's history since its incorporation, the credit rating agencies have not made material changes to OPG's credit ratings, with the one downgrade being linked to a downgrade in the Province's credit rating."⁵

- c. LEI believes that the recommended equity thickness should be based primarily on sufficiency of cash flows, rather than the level of implied provincial support.

⁵ Ontario Energy Board. *EB-2016-0152. Decision and Order. Ontario Power Generation Inc. Application for payment amounts for the period from January 1, 2017 to December 31, 2021.* December 28, 2017. Page 107

Ontario Power Generation Interrogatory # 7

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 16

LEI concludes that "Unit 2 coming online in June 2020 suggests delays related to COVID-19 were minor, and did not have a material impact on project timelines". Please comment on how the fact (see page 39 of the Concentric Report) that COVID-19 resulted in a decision by OPG to defer the start dates of the refurbishment outages of Units 3, 1 and 4 by four months each thereby extending the overall refurbishment schedule, factors into LEI's conclusion that delays related to COVID-19 were minor.

Response:

The following response is provided by LEI.

In LEI's report (footnote 22 on page 16), LEI mentions: "*OPG notes that it completed Unit 2 just over three months later than its committed schedule, with the final two-and-a-half months occurring during the state of emergency declared in Ontario due to the COVID-19 pandemic. OPG also states that relative to approved amounts in EB-2016-0152, "there is a forecast variance of \$132.7M or 2.5%."*

⁶

The current timeline envisions the entire refurbishment project to be completed in October 2026. Given the start date of October 2016 (from EB 2016-0152) and end date of October 2026, 4 months represents only a ~3.3% variance. In addition, in Ex. D2-2-2, OPG states that "*OPG has in place the resources, organization and processes necessary to execute the refurbishment of the Remaining Units, and to complete the Program in its entirety, safely, on time, on budget, and to the required quality level*".⁷

⁶ OPG. EB-2020-0290. Ex. D2-02-02. Unit 2 Performance. December 31, 2020. Pages 1-2 of 17.

⁷ OPG. EB-2020-0290. Ex. D2-02-01. Darlington Refurbishment Program Overview. December 31, 2020. Page 6 of 17.

Ontario Power Generation Interrogatory # 8

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 16

Preamble: LEI notes that “earlier-than-expected availability of vaccines has been witnessed in Canada and around the world, following successful clinical trials of multiple vaccine candidates. Canada has procured access to vaccine supply several times its population and has set a target for making available a vaccine to all adult Canadians by end-of-September 2021. This suggests that operations that resemble pre-pandemic conditions may be feasible by 2022.” (citations omitted).

LEI goes on to acknowledge that “OEB’s determination that COVID-related impacts will be addressed during a payment amount proceeding. However, there is no evidence that reasonable recovery of prudently incurred costs will be denied. Further, COVID-19 and related impacts are a residual issue for the 2017-2021 period, and are not a significant risk factor for the forthcoming period.” (citations omitted).

- a. Please define the word “significant” as it was used in this context.
- b. Does LEI’s determination that COVID-19 and related impacts “are not a significant risk factor for the forthcoming period” depend on Canada meeting its vaccination targets? How has LEI considered the potential impact of variants in their assessment?

Response:

The following response is provided by LEI.

- a. Significant risk in this context refers to a risk that could cause the off-ramp provision to be invoked.
- b. LEI's determination is supported by multiple recent developments that can be considered robust and allow for a resumption of normalcy in the next period

(beginning in 2022). For instance, a recent study of the Pfizer vaccine published in the New England Journal of Medicine demonstrated it remains effective against the B.1.351 variant (first identified in South Africa) and B.1.1.7 variant (first identified in the UK).⁸ A more recent study done by Public Health England suggested that two doses of Pfizer and AstraZeneca was 88% and 60% effective, respectively against the B.1.617.2 variant (identified in India).⁹ While new variants may emerge, LEI believes that public health measures such as mask-wearing, the pace of vaccine development, and existing vaccine infrastructure for roll-out will allow for an effective response to variants.

⁸ Abu-Raddad, Laith et al. *Effectiveness of the BNT162b2 Covid-19 Vaccine against the B.1.1.7 and B.1.351 Variants*. Correspondence. The New England Journal of Medicine. May 5, 2021. DOI: 10.1056/NEJMc2104974

⁹ Lopez Bernal J, Andrews N, Gower C, et al. *Effectiveness of COVID-19 vaccines against the B.1.617.2 variant*. Public Health England. May 22nd, 2021.

Ontario Power Generation Interrogatory # 9

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 18

LEI states, "In addition, in 2020, NB Power celebrated a new milestone of a full year of uninterrupted generation, for the first time since 1994, largely attributed to the refurbishment." Please discuss this statement in consideration of the following news article: [Sleeping giant: NB Power nuclear plant down for repairs again | CBC News](#). How does LEI reconcile this article with its view of risk of returned refurbished units and its view that nuclear has less generation volatility?

Response:

The following response is provided by LEI.

The article cited in the IR identifies that the problems with Point Lepreau are associated with non-nuclear segments of the plant. Specifically, the article states "*Like the current problem with a steam line, most of Point Lepreau's troubles have occurred in the non-nuclear side of the plant, much of which was not refurbished at the time reactor components were being replaced.*" With regards to generation volatility, this is not a "view" of LEI's, but demonstrated by data across a large sample size.

Ontario Power Generation Interrogatory # 10

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 20

LEI states, "In some jurisdictions cited by Concentric, although these protections may exist, penalties to shareholders for overruns are also increasingly being considered. For example, for Georgia Power's Vogtle plant, the Georgia Public Service Commission ruled that the return on equity used to calculate the Nuclear Construction Cost Recovery tariff for Unit 3 costs will be reduced by [10] basis points per month after June 1, 2021, up to the utility's long-term cost of capital. Similar penalties exist for Unit 4, beginning in June 2022. Following a recent setback in construction, it appears the utility is set to miss the June 2021 target. Such penalties are not found in O. Reg. 53/05 with respect to the DRP."

- a. Is it LEI's position that the enabling legislations in South Carolina, Florida, and Georgia provide a lower level of protection regarding the recovery of prudently-incurred costs than O. Reg. 53/05 does?
- b. Are the "penalties" described by LEI "found" in the enabling legislation in Georgia?

Response:

The following response is provided by LEI.

- a. LEI believes that in practice the enabling legislation in the jurisdictions mentioned does not provide greater protections than are available to OPG in Ontario. The subsequent repeal attempts in South Carolina, and financial distress experienced by South Carolina utilities as a result of the failed V.C. Summer nuclear plant, show the risk underlying various US laws and regulations cited.¹⁰ LEI's comments are

¹⁰ In South Carolina, for example, the Base Load Review Act of 2007 facilitated the start of the construction of the V.C. Summer nuclear plant, which was later abandoned. The law specifically allowed utilities to recover costs of financing

consistent with OEB's finding in 2016-0152 that "*O. Reg. 53/05 provides that the OEB must accept the "need" for the DRP, so there is no risk that the OEB will find in some later proceeding that it was not required and refuse to allow it to be added to rate base...The OEB finds that given the planning, the approval of the spending in this proceeding and the regulatory protections afforded OPG, the DRP does not materially increase OPG's business risk.*"¹¹

- b. It is irrelevant whether the "penalties" - and LEI questions the use of quotations in this instance - are "found" in enabling legislation, and LEI has not represented that they were. In assessing risk, investors and lenders take into account the entirety of the legislative and regulatory framework.

nuclear construction, provided it passes a prudency review of pre-construction costs. The law was repealed in 2018 as part of legislative changes that followed the fallout from the project's abandonment in 2017. At the time, co-owners, SCANA subsidiary S.C. Electric & Gas ("SCE&G") and Santee Cooper claimed it would expect construction to cost \$25 billion, more than double the originally approved \$11.4 billion. Staff at the Public Service Commission of South Carolina indicated that the law had driven SCANA to implement nine rate increases totaling \$445 million since 2009 under the state's Base Load Review Act tied to financing the unfinished units. (Sources: Coffman Smith, A. [Santee Cooper, SCE&G cease V.C. Summer nuclear expansion project](#). S&P Global Market Intelligence. July 31, 2017; Sweeney, D. [SC regulatory staff testimony supports \\$193M rate reduction for SCE&G customers](#). September 27, 2018.)

¹¹ Ontario Energy Board. *EB-2016-0152. Decision and Order. Ontario Power Generation Inc. Application for payment amounts for the period from January 1, 2017 to December 31, 2021*. December 28, 2017. Page 105

Ontario Power Generation Interrogatory # 11

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 20

LEI states, "The successful completion of the refurbishment of Unit 2, generally on time and nearly on budget, as well as the lessons learned from both Unit 2 and other CANDU refurbishment, support a lower risk profile for project execution in the subsequent units." Does LEI consider the overlapping of outages in the upcoming Darlington Refurbishment Project, as well as Bruce Power's contemporaneous refurbishment project, to increase or decrease the risk associated with the Darlington Refurbishment Project in the 2022-2026 IR term as compared to the 2017-2021 IR term?

Response:

The following response is provided by LEI.

The question appears to confuse risks to the Ontario power sector as a whole with risks to OPG with regards to cost recovery even in the event the overlapping outages were to pose challenges. LEI's comments are consistent with the following statements by OPG in the Ex D2-02-01 filing in this proceeding: *"OPG has performed the detailed planning that is necessary, including the incorporation of Lessons Learned from Unit 2 and the implementation of Strategic Improvements, to establish the High Confidence Schedule and cost estimates for completing the refurbishment of the Remaining Units and the Program in 2026, safely and with quality."*¹² and *"OPG has in place the resources, organization and processes necessary to execute the refurbishment of the Remaining Units, and to complete the Program in its entirety, safely, on time, on budget, and to the required quality level."*¹³

¹² OPG. EB-2020-0290. Ex. D2-02-01. Darlington Refurbishment Program Overview. December 31, 2020. Page 5

¹³ Ibid. Page 6

Further, as mentioned in response to IR #5 above, OPG is entitled to significant risk mitigation under O. Reg. 53/05. This is consistent with the following OEB findings in its 2016-0152 decision: *"O. Reg. 53/05 provides that the OEB must accept the "need" for the DRP, so there is no risk that the OEB will find in some later proceeding that it was not required and refuse to allow it to be added to rate base... The OEB finds that given the planning, the approval of the spending in this proceeding and the regulatory protections afforded OPG, the DRP does not materially increase OPG's business risk."*¹⁴

¹⁴ Ontario Energy Board. *EB-2016-0152. Decision and Order. Ontario Power Generation Inc. Application for payment amounts for the period from January 1, 2017 to December 31, 2021.* December 28, 2017. Page 105

Ontario Power Generation Interrogatory # 12

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 22

Please provide the underlying data and calculations for Figure 7.

Response:

The following response is provided by LEI.

Please see attached "Exh-N_OPG-12_Att-1.xls"

Ontario Power Generation Interrogatory # 13

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 22

LEI states, "Hydroelectric payment amounts under O. Reg. 53/05 are required to be frozen at the 2021 base rate for the application period (2022-2026). For this reason, Concentric claims that, *"each MWh of nuclear generation will become more financially valuable to OPG as the nuclear generation output that recovers the nuclear revenue requirement is reduced, while continuing to be more financially valuable than each MWh of hydroelectric generation"* [emphasis added] With reference to the "for this reason" reference and Figure 9 of Ex. C1-1-1, Attachment 1, p. 56, please explain whether and, if so why, it is LEI's view that the hydroelectric base rate freeze is the primary driver of the increased relative value of nuclear output over hydroelectric output in the 2022-2026 IR term compared to the 2017-2022 IR term?

Response:

The following response is provided by LEI.

The hydroelectric base rate freeze is among the drivers of the increased relative value of nuclear output over hydroelectric output in the 2022-2026 IR term. However, it is not the primary driver. A key driver is the revenue requirement driven by forecasted reduction in nuclear output due to the DRP, as shown in Ex I1-1-1 (P.11).

As mentioned in the LEI report (on page 21), *"OPG's regulated generation portfolio will see a reduction in nuclear production and a slight increase in hydroelectric production. However, this change in the production share is less meaningful as the revenue share will remain consistent with the previous application, should OPG's filed payment amounts be approved, even with rate smoothing"*.

Ontario Power Generation Interrogatory # 14

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 22-23

LEI states "LEI views risk to mean the degree of unpredictable and unhedgeable net revenue volatility. Based on this definition, it may be necessary to re-examine relative risk of nuclear and hydro generation. Nuclear risk may be a perception based on High-Impact, Low-Probability ("HILP") events – such HILP events have not occurred in North America since 1979, i.e., the Three Mile Island Accident. That incident, which was a partial meltdown of Unit 2 reactor of the Three Mile Island nuclear plant in Middletown, Pennsylvania, led to no loss of life and "*negligible effects on the physical health of individuals or the environment.*" This is not to suggest that the risk of a HILP event is zero, or that such events have not occurred outside of North America after Three Mile Island. Instead, it is intended as a reminder that some perspective is necessary when discussing relative risk. Further, the perceived higher levels of risk of nuclear may not take into consideration that studies have shown nuclear generation stations have higher safety records relative to hydroelectric stations."

- A. LEI indicates that LEI views risk to mean the degree of unpredictable and unhedgeable net revenue volatility. Does LEI consider any other factors in its definition of risk? For example, does LEI also consider variability in cash flows or earnings in its definition of risk?
- B. Please clarify and explain further whether LEI is equating the risk of a HILP nuclear safety event with the risk of "unpredictable and unhedgeable net revenue volatility".
- C. Please provide citations to independent third party research, analysis or evidence that support LEI's view that "the perceived higher levels of risk of nuclear may not take into consideration that studies have shown nuclear

generation stations have higher safety records relative to hydroelectric stations.”

Response:

The following response is provided by LEI.

- A. Variability of cash flows or earnings must be unpredictable and unhedgable to be considered within the definition of risk.
- B. As observed in the LEI report, a HILP event does not equate with zero risk; perspective is necessary when discussing relative risk. HILP events are not unique to nuclear plants.
- C. LEI has identified in its report an academic study by Sovacool et al published in 2016 that uses an original dataset between 1950 and 2014 that observes: "*Wind energy is the most frequent to incur an accident within our sample (48.8 percent of accidents), hydroelectric accidents tend to be the most fatal (97.2 percent of all deaths), and nuclear energy accidents tend to be the most expensive (accounting for 90.8 percent of damages).*"¹⁵ A more recent academic study by Boddard in Energy magazine builds on this study and demonstrates that globally, hydro has a higher hazard rate than nuclear, where the hazard rate is defined as the ratio of fatalities and energy output from various technologies.¹⁶ LEI has seen no evidence that ratings or financial analysts have reviewed these studies.

¹⁵ Sovacool, Benjamin et al. *Balancing safety with sustainability: assessing the risk of accidents for modern low-carbon energy systems*. Journal of Cleaner Production. (112) 2016. 3952 – 3965.

¹⁶ Boddard, Nicolas. *Safety along the energy chain*. Energy. (150) 2018. 1018 – 1030.

Ontario Power Generation Interrogatory # 15

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 23

Please provide the data in electronic format supporting Figure 8.

Response:

The following response is provided by LEI.

Please see the attachment "Exh-N_OPG-15_Att-1.xls"

Ontario Power Generation Interrogatory # 16

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 24

LEI states that "OPG's change in business risk related to climate change is limited, if any."

- a. In LEI's view, has investors' focus on ESG increased, decreased, or stayed the same as when the OEB last reviewed OPG's equity thickness in 2016?
- b. Please identify the credit rating agencies that took into account ESG considerations in 2016 in their rating methodology for regulated electric and gas utilities.
- c. Please identify any pension funds and institutional investors that explicitly took into account ESG considerations in 2016 in making their investment decisions.

Response:

The following response is provided by LEI.

- a. While there has been a perception of increased discussion on ESG risk in recent years, investor focus on ESG principles existed prior to the current 2017-2021 period.
- b. As one example, in 2016, investors and credit rating agencies released a statement indicating that as signatories to the statement, that they "*recognise that environmental, social and governance (ESG) factors can affect borrowers' cash flows and the likelihood that they will default on their debt obligations. ESG factors are therefore important elements in assessing the creditworthiness of borrowers. For corporates, concerns such as stranded assets linked to climate change, labour*

relations challenges or lack of transparency around accounting practices can cause unexpected losses, expenditure, inefficiencies, litigation, regulatory pressure and reputational impacts."¹⁷ Credit rating signatories included Moody's, S&P Global Ratings, while institutional investor signatories included British Columbia Investment Management Corporation, Caisse de dépôt et placement du Québec, Ontario Teachers' Pension Plan, and TD Asset Management, among other entities.

Further, LEI observes that as a signatory of the UN's Principles for Responsible Investment ("PRI") initiative since 2012, S&P Global Ratings has committed to integrating ESG issues into its business practice. Specifically, the first principle states that "*We will incorporate ESG issues into investment analysis and decision-making processes.*"¹⁸

- c. See response to (b) above. In addition, according to the PRI, at the end of 2016, PRI signatories exceeded 1,700 with assets under management ("AUM") totaling over US\$70 trillion.¹⁹

¹⁷ Principles for Responsible Investment. [Statement on ESG in Credit Ratings](#). 2016. Page 1.

¹⁸ Principles for Responsible Investment. [Shifting perceptions: ESG, credit risk and ratings \(Part 1: The state of play\)](#). 2017. Page 2.

¹⁹ Ibid. Page 7.

Ontario Power Generation Interrogatory # 17

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 26

LEI states, "Thus, climate change could lead to increased generation at OPG's regulated hydroelectric facilities and may serve to offset to some degree any potential risk due to adverse events." Please explain how the increased generation arising from climate change could offset risks due to adverse events related to climate change.

Response:

The following response is provided by LEI.

LEI's comment, cited above, was to make the observation that there is potential for some climate change phenomena to be beneficial for OPG. For example, the LEI report (on page 26) notes: "*recent research indicates that hydroelectric production potential in Ontario is likely to increase as a result of climate change...*"²⁰

²⁰ Amir Jabbari, Amirali and Ali Nazemi. "Alterations in Canadian Hydropower Production Potential Due to Continuation of Historical Trends in Climate Variables." *Resources* 8.163 (2019): 163. Digital.

Ontario Power Generation Interrogatory # 18

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 38

LEI states, regarding benchmarks it uses in its credit metrics analysis, that "S&P benchmarks used for this analysis are aligned with the 'low volatility' criteria, consistent with the categorization of regulated utilities."

- a. Please provide workpapers and Microsoft Excel spreadsheets that support the calculation of the credit metrics in Figure 17 on page 39 of LEI's report, including the calculation of a 1% change in the equity ratio for each metric.
- b. It appears that LEI treats all credit metrics as being equally valuable to the assessment of equity thickness impact on credit metrics. Which of the five ratios are considered core and supplementary ratios to S&P credit assessments and what is LEI's understanding of their relative importance?
- c. See Exhibit A2-3-1, Attachment 11. Please also see Attachment 1: July 12, 2016 S&P report titled "Ontario Power Generation Inc.," at 4-5. In both reports, S&P uses the medial-volatility financial benchmark table. Please provide versions of Figure 17 and Figure 18 to the LEI report using the medial-volatility financial benchmark table.
- d. Please confirm whether the debt amount used in the derivation of the credit metrics in figure 17 includes pension and other post employment benefit (OPEB) obligations in accordance with S&P's calculation methodology. If not, please explain why.

Response:

The following response is provided by LEI.

- a. Please see the attachment Exh-N_OPG-18_Att-1.xls.

- b. While S&P categorizes the FFO/Debt and Debt/EBITDA ratios as 'core'; and CFO/Debt and FFO/interest as 'supplementary', these are all key ratios in assessing coverage ratios of a corporation. According to S&P's methodology, the agency assesses a company's cashflow/leverage by "*determining the relevant core ratios, anchoring a preliminary cash flow assessment based on the relevant core ratios, determining the relevant supplemental ratio(s), adjusting the preliminary cash flow assessment according to the relevant supplemental ratio(s), and, finally, modifying the adjusted cash flow/leverage assessment for any material volatility.*"²¹ This characterization does not suggest diminished importance of supplemental ratios, but rather an order of operations. It is also notable that DBRS identifies 'primary metrics' in its financial risk analysis, and all three ratios (i.e., cashflow-to-debt, debt-to-capital, and EBIT-to-interest) are considered primary metrics.²²
- c. While S&P uses the medial-volatility financial benchmarks for assessing OPG as a whole (i.e., including OPG's regulated and unregulated assets), LEI's illustrative analysis is focused on OPG's regulated assets only. This differentiation of analysis substantiates a downwards adjustment in volatility, and as such, LEI has utilized the low-volatility financial benchmarks for its analysis. While LEI does not believe medial-volatility financial benchmarks should be applied to OPG's regulated assets only, per the IR request, please see versions of Figure 17 and Figure 18 using the medial volatility financial benchmarks in the attachment Exh-N_OPG-18_Att-2.pdf.
- d. For LEI's illustrative credit metrics analysis, LEI has assumed significantly higher debt than planned debt to be consistent with rate base financed by capital structure, as projected in 'Exhibit C1-01-01 Tables' filed by OPG. For instance, in 2026, the projected ratebase financed by capital structure is \$22,189.6 million (per Ex C1-01-01 Table 1), and projected total debt (per the same source, i.e., Ex C1-01-01 Table 1) is 11,094.8 million. In LEI's analysis, at 47% equity capitalization, total debt is assumed to be \$11,760.5 million (i.e., 53% of projected ratebase) in 2026.

²¹ S&P Global Ratings. *Corporate Methodology*. November 19, 2013. Page 28.

²² DBRS Morningstar. *Methodology. Rating Companies in the Regulated Electric, Natural Gas and Water Utilities Industry*. September 2019.

Ontario Power Generation Interrogatory # 19

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Pages 33 and 48

Preamble: LEI provides the following explanation of the Fair Return Standard ("FRS") (citations omitted, emphasis in original):

"For a regulator considering a regulated utility's financial risks in setting the cost of capital under the FRS, three requirements must be met: comparable investment, financial integrity, and capital attraction. Further the OEB has previously established that among these requirements, *'none ranks in priority to others.'*"

Later, LEI notes that "utility betas, beyond being a metric for perceived market risk, may be less relevant to equity thickness assessment than to the cost of equity. The determination of equity thickness should be more focused on the utility's ability to meet appropriate credit coverage ratios for debt."

Question(s):

Please explain how LEI's statement that the "determination of equity thickness should be more focused on the utility's ability to meet appropriate credit coverage ratios for debt" is consistent with the OEB's Fair Return Standard.

Response:

The following response is provided by LEI.

LEI does not see any inconsistency in these statements. LEI believes utility betas are more relevant for determining cost of equity. Determining cost of equity is part of "setting the cost of capital under the FRS." LEI is confident that its recommended equity thickness is consistent with all three of the requirements of the FRS.

Ontario Power Generation Interrogatory # 20

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 41

LEI states "Relative to lower levels, an equity thickness at 47% facilitates maintaining an investment grade rating due to reduced risk levels associated with: (i) Debt/EBITDA in 2023, 2025, 2026; (ii) FFO/Interest in 2022; and (iii) FFO/Debt in 2022." Please clarify what is meant by "an investment grade rating due to reduced risk levels."

Response:

The following response is provided by LEI.

This statement referred to categorization of financial risk. As stated in the LEI report (on page 40), for S&P ratings, "Minimal" represents the lowest financial risk, followed by "Modest", "Intermediate", "Significant", "Aggressive" and "Highly leveraged". For DBRS, the Financial Risk Assessment ("FRA") ratings are from highest to lowest: AA, A, BBB, and BB/B.

Ontario Power Generation Interrogatory # 21

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 44

LEI states that "Setting a fixed multi-year ROE presents the risk that inflation rates push bond yields higher, thus understating a fair ROE, as currently calculated using the OEB ROE framework."

- a. If the ROE for OPG is understated and lower than the fair ROE as determined using the OEB's ROE framework, would this return satisfy the Fair Return Standard?
- b. Please explain the relationship, if any, between the authorized ROE and the deemed equity ratio for a regulated utility.

Response:

The following response is provided by LEI.

- a. LEI is not suggesting that the ROE as currently established is understated; rather, LEI notes the possibility of it being so at some point in the future. Were that to occur, the return would not satisfy the Fair Return Standard if the deviation were to be sustained over time.
- b. The authorized ROE and the deemed equity ratio are components of the weighted average cost of capital for the regulated entity.

Ontario Power Generation Interrogatory # 22

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 47

Please provide the underlying data or workpapers for Figure 22 on page 47 of LEI's report. Please indicate whether the Beta coefficients in Figure 22 are raw or adjusted. If the Beta coefficients are adjusted, what formula was used to adjust Beta?

Response:

The following response is provided by LEI.

Please see enclosed the attachment Exh-N_OPG-22_Att-1.xls.

The beta coefficients are adjusted, and sourced directly from Bloomberg. According to Bloomberg, "*The Adjusted Beta is an estimate of a security's future Beta. Adjusted Beta is initially derived from historical data but modified by the assumption that a security's true Beta will move towards the market average, of 1, over time. The formula used to adjust Beta is: $(0.67) \times \text{Raw Beta} + (0.33) \times 1.0$* "²³

²³ Bloomberg Professional Service - Help section definitions

Ontario Power Generation Interrogatory # 23

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Pages 47-48

Please explain how Figure 22 supports the statement that "The increase in betas since the start of the pandemic puts them near the level at the time of OEB's previous decision."

Response:

The following response is provided by LEI.

This statement refers to the S&P 500 Utility 5-year beta shown in Figure 22, which was between 0.8 and 0.9 around the EB-2009-0084 decision. Note the focus is on global, not local, capital markets.

Ontario Power Generation Interrogatory # 24

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 48

Preamble: LEI indicates that “strong economic recoveries are projected for 2021 and 2022 as immunization programs ramp up and economic activities return to pre-pandemic levels.” (citations omitted). One of the sources LEI cites as supporting this statement is the Bank of Canada’s “Monetary Policy Report: January 2021.” On page 25, that report indicates:

- “Uncertainty around the projection remains unusually high.”
- “The Bank assumes that broad immunity is obtained through vaccination by the end of 2021. There is a risk, however, that setbacks in the distribution or effectiveness of vaccines could contribute to another surge of the virus. The spread of new, more contagious variants could also lead governments to impose stricter lockdowns.”
- “Another key source of uncertainty is the sensitivity of economic activity to the evolution of the virus, lockdowns and other containment measures.”
- “There is also considerable uncertainty about the long-term impacts of the pandemic.”
- “The pandemic may also accelerate long-term structural trends that have been underway for some time. Rapid acceleration in e-commerce may lead to less demand for retail space. Success with remote work could lead to reduced demand for office space. Experience with virtual meetings may imply less business travel. These types of structural changes tend to affect both demand and supply, with demand effects usually having an impact sooner.”

Question(s):

Please discuss the effect of “unusually high” projection uncertainty on LEI’s conclusions regarding the effects of COVID-19 on projected economic growth in Canada.

Response:

The following response is provided by LEI.

While there remain uncertainties around all projections created during a global pandemic, LEI believes that there are key developments described in the January 2021 report that are robust. For instance, the report indicates that *"with vaccines being rolled out earlier than anticipated, the recuperation in the Canadian economy is now more secure, and medium-term growth is forecast to be stronger."*²⁴

In the subsequent April 2021 report (also cited in the LEI report), many of these findings have proven true. For instance, the April 2021 report notes that *"economic activity in recent months has been more resilient than anticipated, with consumers and businesses learning new ways to adapt to public health measures. The rollout of COVID-19 vaccines is also progressing faster in some jurisdictions than previously expected."*²⁵

²⁴ Bank of Canada. "Monetary Policy Report: January 2021". January 2021. Page 8 of 32.

²⁵ Bank of Canada. "Monetary Policy Report: April 2021". April 2021. Page 5 of 36.

Ontario Power Generation Interrogatory # 25

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 52

"The successful issuance of these bonds suggests there is substantial availability for debt financing that is accessible to OPG, indicating there is less need for equity thickness to increase." - Can LEI explain in detail how Green Bond issuance (i) provide a higher debt capacity for OPG, (ii) are beneficial to OPG's credit metrics, and (iii) allow OPG to have a higher debt capital structure?

Response:

The following response is provided by LEI.

- (i) The successful issuances under OPG's green bond program substantiates higher debt financing availability to OPG.
- (ii) OPG notes that its commitment to sustainability targets in its financing needs *"reflects OPG's leadership position on sustainability, while reducing credit costs."*²⁶
- (iii) Reductions in the cost of debt improve credit metrics, allowing an entity to carry more debt without breaching coverage ratios. Note, however, that LEI is not proposing a "higher debt capital structure" relative to its existing deemed equity thickness; LEI is in fact recommending an increase in equity thickness.

²⁶ Ontario Power Generation website. [OPG incorporates sustainability targets into financing](#). December 17, 2020.

Ontario Power Generation Interrogatory # 26

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 54

LEI states "LEI believes that the peer analysis component of the proceeding has become somewhat circular, with experts basing their cost of capital recommendations on data from a similar set of comparables and using similar screening criteria."

- a. By "the proceeding," is LEI referring to this proceeding (i.e., EB-2020-0290), proceedings before the Ontario Energy Board more generally, or North American rate proceedings in which the cost of capital is decided?
- b. Is it LEI's opinion that Moody's use of three U.S.-based regulated utilities in its peer analysis for OPG is "somewhat circular."
- c. In LEI's opinion, are OPG's regulated operations more comparable from a risk perspective to utility holding companies or utility operating companies?

Response:

The following response is provided by LEI.

- a. LEI is referring to North American rate proceedings in general.
- b. LEI believes that Moody's sample size is unreasonably small. However, LEI's comment about circularity was focused on regulatory proceedings, not ratings agencies. As indicated in LEI's report (on page 54), the context is that "*While LEI finds Concentric's screening criteria for the peer review analysis to be generally reasonable, it is LEI's view that the definition of what constitutes a suitable comparator for the purposes of a peer analysis is too narrow*" and to avoid the

circularity *"merits broadening the definition of what constitutes a suitable comparator."*

- c. As discussed in the LEI report (on page 56), LEI is of the *"view that a focus on the equity ratios at the holding company level is reasonable. This is because holding company ratios are market determined. Considering the fact that unregulated businesses in the holding company face a higher amount of risk, but the equity thickness is less, this suggests that the market will tolerate more debt in the capital structure. In this sense, a focus on the authorized equity ratios at regulated operating companies would be too generous."*

Ontario Power Generation Interrogatory # 27

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 57

LEI states "[S&P's] most recent update in November 2020 illustrates nearly all Canadian jurisdictions ranked as 'most credit supportive' relative to US jurisdictions."

- a. In LEI's opinion, what are the main factors that differentiate Canadian jurisdictions "relative to US jurisdictions" such that a difference in equity thickness is warranted?
- b. Please confirm that nine U.S. jurisdictions are assessed by S&P to be "most credit supportive."

Response:

The following response is provided by LEI.

- a. As stated and cited in the LEI report (on page 58), in its updated rating methodology, Moody's states that, in Canada, *"the framework has historically been viewed as predictable and stable, which has helped offset somewhat lower levels of equity in the capital structure"*.
- b. Confirmed. LEI notes the jurisdictions include Alabama, Colorado, FERC (electric), Florida, Iowa, Kentucky, Michigan, North Carolina, and Wisconsin.

Ontario Power Generation Interrogatory # 28

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 57

Can LEI update figure 28 but for "Most credit supportive" and "Highly credit supportive" jurisdictions only from figure 29?

Response:

The following response is provided by LEI.

Please see attached Exh-N_OPG-28_Att_1.pdf.

Ontario Power Generation Interrogatory # 29

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 59-61

Preamble: In Figures 30 and 31, LEI identifies five independent power producers ("IPPS") that it considers "analogous to regulated generators."

- a. Please provide the S&P and any other credit ratings of each of the five IPPs identified by LEI.
- b. Please provide S&P's stated expectation for FFO-to-Debt and debt-to-EBITDA (and similar metrics stated from other rating agencies) for each of the five IPPs for the 2021-2022 period.
- c. Please provide S&P's and any other rating agencies business risk assessment for each of the five IPPs.
- d. Please provide Beta coefficients for the five IPPs for the same time period and calculated similarly to the Beta coefficients presented in Figure 22.
- e. Are the equity thickness ratios in Figure 31 based on the book value of equity or the market value of equity? If the book value, please provide a version of Figure 31 based on the market value of equity for each IPP in each time period.
- f. Please provide the underlying data or workpapers for Figures 30 and 31 in LEI's report. Please provide this information in working Microsoft Excel format, to the extent applicable.

Response:

The following response is provided by LEI.

- a. S&P credit ratings:
 - (i) Boralex Inc. (BLX): N/A;
 - (ii) Brookfield Renewable Partners L.P. (BEP.UN): BBB+ ([July 2019](#))
 - (iii) Innergex Renewable Energy Inc. (INE): BB+ ([December 2020](#)); rated as BBB- by Fitch ([April 2021](#))
 - (iv) Northland Power Inc. (NPI): BBB ([March 2021](#))
 - (v) TransAlta Renewables Inc. (RNW): N/A
- b. S&P does not state FFO/Debt or Debt/EBITDA explicitly for each of the five IPPs.
- c. In the response for "a" above, please see weblinks provided to rating agency reports, where available.
- d. Please see the attachment Exh-N_OPG-29_Att-1.xls
- e. The total common equity ratios in Figure 31 are sourced directly from S&P Capital IQ, and are based on the book value of equity. S&P Capital IQ confirmed that they do not estimate these ratios based on market value of equity.
- f. Please see the attachment Exh-N_OPG-29_Att-2.xls

Ontario Power Generation Interrogatory # 30

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 60

Regarding LEI's analysis of zero-emitting IPPs:

- a. Please explain why TransAlta's equity ratio, at 68.5%, is so much higher than the equity ratios of the other IPPs.
- b. Please provide LEI's understanding of what is meant by "regulatory-style contracts" referenced by DBRS in the context of OPG's assets?

Response:

The following response is provided by LEI.

- a. The total common equity ratios in Figure 31 are pulled directly from S&P Capital IQ's capital structure summary, and are not calculated by LEI. Please see the attachment Exh-N_OPG-29_Att-1.xls, referenced in the previous interrogatory response (OPG-29).
- b. The full quote from DBRS is as follows: "*DBRS Morningstar also considers assets under regulatory-styled contracts (such as Lower Mattagami Energy Limited Partnership (LMELP; rated A (high) with a Stable trend by DBRS Morningstar), PSS Generating Station Limited Partnership (PSS; rated A (low) with a Stable trend by DBRS Morningstar) and UMH Energy Partnership (UMH; not rated by DBRS Morningstar)) to have similar credit risks as regulated operations because those contracts mimic the current regulatory construct under the OEB.*"²⁷

²⁷ DBRS Morningstar. Ontario Power Generation Inc. April 16, 2020. Page 4 (Filed as Ex. A2-03-01. Attachment 4)

Ontario Power Generation Interrogatory # 31

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 62

LEI states "Ofgem moved to lower allowed returns to below 5% (in real terms) for the RIIO-2 period."

- a. Please provide the formula and inputs to the Ofgem allowed returns for the RIIO-2 period.

Response:

The following response is provided by LEI.

Assessed cost of equity (4.55%) = Allowed return on equity (4.30%) + Expected outperformance (0.25%), where:²⁸

- Assessed cost of equity = 4.55% (at 60% notional gearing)
- Expected outperformance = 0.25% (at 60% notional gearing)
- Allowed return on equity = 4.30% (at 60% notional gearing)

Detailed inputs from OFGEM's Finance Annex:²⁹

- Risk-free rate forecast: -1.58%
- Total market returns: 6.5%
- Debt beta: 0.075
- Asset beta: 0.349
- Unlevered beta: 0.311
- Notional equity beta: 0.759
- CAPM implied cost of equity: 4.55%

²⁸ Ofgem. *RIIO-2 Final Determinations - Core Document*. December 8, 2020. Page 52.

²⁹ Ofgem. *RIIO-2 Final Determinations - Finance Annex (Revised)*. February 3, 2021. Page 24

Ontario Power Generation Interrogatory # 32

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 63-64

Preamble: LEI states that "while there is a perception among analysts that generation is riskier than wires, with nuclear potentially more risky than other generation sources, there is little discussion of the actual magnitude of the differences in the risk levels." LEI goes on to conclude that "OPG's regulated generation risk is similar to other regulated entities, and the extent of differences in revenue predictability between regulated generation and wires is exaggerated." Further, LEI indicates that "[a]djusting for greater risk would likely still result in equity thickness of consistent with the 47% recommended here."

Question(s):

- a. Please provide all evidence supporting LEI's statement that "there is a perception among analysts that generation is riskier than wires, with nuclear potentially more risky than other generation sources".
- b. Please provide all analyses LEI has developed that adjusts for the risk differential between regulated generation and wires.
- c. Please provide all evidence, analyses, or research LEI has developed, reviewed, or is aware of that quantifies the magnitude of the differences in risk levels between regulated generation and wires.
- d. Please provide all evidence that debt and/or equity investors share LEI's view that regulated generation risk is similar to other regulated entities.

Response:

The following response is provided by LEI.

- a. Ratings agencies generally consider power generation to be more risky than wires. For instance, Moody's methodology for regulated gas and electric utilities defines generation from Challenged and Threatened Sources as credit negative. Challenged sources include generation plants that face higher but not insurmountable economic hurdles resulting from penalties or taxes on their operation. Threatened sources include generation plants that are not currently able to operate due to major unplanned outages or issues with licensing or other regulatory compliance, and plants that are highly likely to be required to deactivate, whether due to the effectiveness of currently existing or expected rules and regulations or due to economic challenges. This qualifier does not exist for transmission and distribution utilities rated under this methodology. Moody's methodology also makes note of "Nuclear Issues" in the appendix, stating that "Utilities with nuclear generation face unique safety, regulatory, and operational issues." It also observes that "other general issues for nuclear operators include higher costs and lower reliability related to the increasing age of the fleet."³⁰ As LEI has noted, however, for regulated nuclear assets, as opposed to merchant ones, these late in life risks are compensated for.
- b. LEI believes the focus should be on the underlying regulatory mechanisms rather than the type of assets. As long as the regulatory mechanisms are the same, the outcome will be similar. As mentioned in the LEI report (on page 63): *"Comparative risk analysis should be based on relative differences between unhedgeable revenue volatility. Long term volatility of revenues should be a key consideration, and companies facing similar regulatory regimes are likely to have fewer differences in revenue predictability regardless of the underlying nature of the activity. The focus needs to be on actual regulatory mechanisms, instead of underlying technology. On this basis, LEI is of the view that OPG's regulated generation risk is similar to other regulated entities, and the extent of differences in revenue predictability between regulated generation and wires is exaggerated."*

LEI reviewed 5-year adjusted unlevered betas of 41 North American utilities, of which 35 were integrated with regulated generation, and 6 were not.³¹ Were regulated generation to be significantly more risky than wires, one would expect that the companies without regulated generation would have lower betas than those with generation. Due to the small sample size for utilities that are predominately wires entities, calculations are sensitive to outliers. LEI ran multiple

³⁰ Moody's Investor Service. *Regulated electric and gas utilities*. June 23, 2017.

³¹ Data sourced from S&P Capital IQ

cases varying the composition of both groups. Some cases showed wires betas higher than those of integrated utilities; others showed the reverse. In all cases, the difference with the average of the entire sample was less than the standard deviation of the entire sample. While North American utilities are heterogenous in their asset mix in terms of geographic location, merchant exposure, and proportion of natural gas distribution, and further data analysis would be useful, examination of betas alone does not make a conclusive case for a particular level of increased riskiness for generation owning utilities.

- c. The question substantiates LEI's point, that little such analysis has been done. Furthermore, the focus should be on the expected difference in unhedgeable volatility of cash flows; given the existence of the same regulatory mechanisms for regulated generation as for wires, it would be unsurprising for the cash flows to have similar risk profiles.
- d. As stated in LEI's report (on page 60): *"Ratings agencies have taken similar views for OPG's contracted assets, with DBRS noting that it "considers assets under regulatory-styled contracts...to have similar credit risks as regulated operations because those contracts mimic the current regulatory construct under the OEB."*

Ontario Power Generation Interrogatory # 33

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 64

LEI states "Acknowledging that generation is more risky than wires, adjusting UK and Australian experience for greater risk would still result in equity thickness consistent with 47%." Please provide all analysis LEI has performed supporting that statement.

Response:

The following response is provided by LEI.

In making this comment, LEI referred to Figure 33 (on page 63) of LEI report, which shows equity thickness for: (i) UK distribution utilities is 35% (for 2015-2023); (ii) UK transmission utilities is 45% (for 2021-2026); and (iii) Australian network utilities is 40% (for 2018-2021). LEI's proposed level of 47% is higher than all of these. While LEI questions whether in fact revenues from regulated generation are materially more risky than from wires, 47% implies an adjustment of 17% on average relative to the sample networks.

Ontario Power Generation Interrogatory # 34

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 65

LEI discusses the potential for the proposed Small Modular Reactor at the Darlington site to mitigate some of the reductions in OPG's workforce as a result of the planned Pickering shutdown. Please explain in greater detail how the redeployment of staff to this work would mitigate the risks specifically associated with the organizational changes, business transformation and workforce redeployment (as opposed to risk of quantum and recovery of the downsizing costs) identified by Concentric at Ex. C1-1-1, Attachment 1, pp. 49-50.

Response:

The following response is provided by LEI.

Change is not the same as risk, and OPG is more insulated from the impact of unexpected outcomes from these changes than is a business operating in a competitive market. OPG's business is not significantly "transforming"; it will in fact be in precisely the same business it is in now, albeit with a different asset composition. Workforce redeployment is governed by known contractual agreements using processes that have been used before. As summarized in the LEI report (on page 66):

"... this risk may be mitigated due to the following reasons:

- OPG has prior experience with a business transformation initiative carried out between 2011 and 2015;*
- Possibility of technical staff redeployment, should OPG receive additional approvals and proceed with investment decision to pursue a Small Modular Reactor ("SMR") at Darlington of ~300 MW; and*

- *Costs associated with the workforce transition for Pickering staff are allocated to a dedicated deferral account."*

Further, Concentric, on page 50 of its report (Ex. C1-1-1/ Attachment 1) specifically related to the discussion of 'Pickering Retirement' states: "*Concentric also notes that OPG anticipates that it will incur a significant amount of severance and workforce transition costs, currently estimated in the order of \$1 billion, related to the Pickering closure. A recent amendment to O. Reg. 53/05 has established a deferral account to record and subsequently recover such costs, subject to the OEB's approval through a prudence review. As Concentric assumes that this mechanism will allow for the substantial full recovery of those costs by OPG, this did not have a material impact on our assessment of OPG's risk profile.*"³²

³² Concentric Energy Advisors. *Ontario Power Generation Common Equity Ratio Study*. Exhibit C1-1-1, Attachment 1. Page 50 of 131.

Ontario Power Generation Interrogatory # 35

Issue: 6.1

Issue: Are OPG's proposed capital structure and rate of return on equity appropriate?

Interrogatory

Reference: Exhibit M / Page 68

LEI states "Broadening the analysis to include overseas utilities and contracted IPPs, it is observed that much lower equity thickness levels have been achieved, without any apparent decrease in financeability." Absent the broadening of LEI's analysis to include overseas utilities and contracted IPPs, what would LEI's recommended equity thickness be for OPG in this proceeding?

Response:

The following response is provided by LEI.

References to overseas utilities and contracted IPPs are included for context. The basis for LEI's recommendation is primarily related to OPG's credit metrics and business risk profile. Thus, even if these entities were ignored, LEI's recommended equity thickness for OPG in this proceeding would remain at 47%. LEI believes this is consistent with overall changes in risk relative to the previous period, and the need to maintain an investment grade rating.