

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*;

AND IN THE MATTER OF an Application by Ontario Power Generation Inc. for an order or orders approving payment amounts for prescribed generating facilities commencing January 1, 2022.

INTERROGATORIES**ON BEHALF OF THE****SCHOOL ENERGY COALITION****A1-SEC-1**

[A1-2-1, p.1,2, A1-3-1, p.2] Please confirm that O.Reg. 53/05, s. 6(2)(13)(i) stipulates that the hydroelectric payment amounts for 2022 through 2026 shall be the payment amount in effect on December 31, 2021, not January 1, 2021. Please confirm that, except for adding riders of \$1.33/MWh for the first three years, and \$0.69/MWh for the last two years, in both cases pursuant to s. 6(3)(c), OPG is proposing that no changes be made to the current hydroelectric payments amount between now and December 31, 2021.

A1-SEC-2

[A1-2-1, p.3, H1-1-1, p.33] Please confirm that, for rate smoothing purposes, OPG is proposing to defer collection of 4.56% of its nuclear revenue requirement over the five-year test period, and that at the end of 2026 OPG forecasts that the balance in the Rate Smoothing Deferral Account (excluding accrued interest) will be \$1,252.5 million. Please provide an estimate of the balance of that account on December 31, 2026 including accrued interest to that date.

A1-SEC-3

[Ex. A1-2-1, p.4] Please complete the following table for nuclear payment amounts and riders:

| Effective Date | Smoothed Pmt. Amt. Actual/ Proposed | Unsmoothed Pmt. Amt. Actual/ Proposed | Actual/ Proposed Rate Riders | Total Smoothed Rate | Total Unsmoothed Rate |
|----------------|-------------------------------------|---------------------------------------|------------------------------|---------------------|-----------------------|
| Jan 1/21 | | | | | |
| Jan 1/22 | | | | | |
| Jan 1/23 | | | | | |
| Jan 1/24 | | | | | |
| Jan 1/25 | | | | | |
| Jan 1/26 | | | | | |

A1-SEC-4

[A1-3-1, p.6] Please describe and quantify the difference between \$460 million of savings and \$460 million of savings “on an inflation-adjusted basis”.

A1-SEC-5

[A1-3-1, p.10] Please provide the basis on which OPG determined that a 4% increase in WAPA in 2022, following by increases of 1% in each year, was acceptable. In providing that explanation, please specifically deal with:

- a. The impact of the freeze of the hydroelectric payment amounts, and the effective increases being proposed in nuclear payment amounts alone; and
- b. The overall increases in WAPA and in nuclear payment amounts when rate riders are taken into account.

A1-SEC-6

[A1-3-1, p.12] Please restate the bill impacts in 2022 through 2026 to reflect a typical school with nuclear usage of 11,000 kwh per month.

A1-SEC-7

[A1-3-2, p.1,12] Please provide a table showing the proposed nuclear revenue requirements for each of 2022 through 2026 without the proposed changes in stretch factor (i.e. using a stretch factor unchanged from EB-2016-0152).

A1-SEC-8

[A1-3-2, Attachment 2, p.3] Please describe the nature of the “higher fuel costs” attributable to hydroelectric generation, and the amount of that increase in 2019.

A1-SEC-9

[A1-4-1, Attachment 2, p.6] Please provide the 2020 annual report to the Minister under subsection 53.4(1) of the *Electricity Act* on or before 90 days after the end of the 2020 fiscal year.

A1-SEC-10

[A1] Please provide a copy of all benchmarking analyses, reports, opinions and/or assessments, undertaken by, for, or that includes OPG, since 2017, regarding any aspect that directly or indirectly relates to a material aspect of its regulated business that is not already included in this application.

A1-SEC-11

[A1] Please provide summaries of all internal audit reports conducted since 2017, related to any aspect that directly or indirectly relates to OPG’s regulated business, their findings, recommendations, and the status of any actions that are to be taken.

A1-SEC-12

[A1; EB-2016-0152, PAO, Appendix A] In a similar format to Tables 1,2,3, 4 and 5 from the EB-2016-0152 PAO, Appendix A, please provide a table that shows for each year between 2017 and 2021, the approved nuclear revenue requirement (Lines 1 through 26) and the actual/forecast 2017 to 2021 revenue requirement on the same basis (lines 1 through 24).

A2-SEC-13

[A2-2-1, Attachment 1, p.12] Please provide the forecast net income attributable to OPG regulated business, separated by hydroelectric and nuclear, for each between 2020 and 2026.

A2-SEC-14

[A2-2-1, p.21] OPG notes that based on its customer engagement activities, “[c]ustomers were supportive of investments in new and innovative technologies that would lead to guaranteed savings, but did not

support further investing in pilot projects.” In response, OPG notes that it is implementing a Monitoring and Diagnostic Centre and other digital solutions where it “is confident that there is a high likelihood that these investments will lead to cost savings, with many of the investments in technological solutions included in the plan supported by experience at other organizations.”:

- a. Please provide details regarding these “other digital solutions”, including quantified cost and expected cost savings.
- b. Please provide the business case and any other relevant information regarding the Monitoring and Diagnostic Centre which quantifies the costs and expected cost savings.
- c. Have the expected cost savings been included in the budgets underlying the application? If they have, please provide details of where and how they have been included.

A2-SEC-15

[A2-3-1] Please provide a copy of any recent rating agency reports that include analysis related to OPG’s 2020 year-end financial information.

B1-SEC-16

[B1] Please provide a list of all capital projects, between 2022 and 2026 that OPG believes are subject to the Nuclear Capacity Refurbishment Variance Account due to O. Reg. 53/05. For each, please provide the project name, the date they are expected to go in-service, the forecast cost, and a summary of why OPG believes they meet the requirements under O. Reg. 53/05.

B1-SEC-17

[B1-1-1] Please update Table 2 to include 2020 actuals.

B1-SEC-18

[B3-1-1] Please update Table 1 to include 2020 actuals.

B1-SEC-19

[B3-4-1] Please update Table 1 to include 2020 actuals.

C1-SEC-20

[C1-1-1, Attachment 1, p.4,6,33,40] Concentric forecasts that OPG’s execution risk from the Darlington Refurbishment Project will increase in the IRM term. However, OPG advises that it has successfully completed the first unit, plus common elements, on time and on budget. Why does the successful completion of more than 35% of the DRP not result in a reduction in execution risk, rather than an increase in execution risk?

C1-SEC-21

[C1-1-1, Attachment 1, p.5,6,31] Please confirm the expert’s opinion that the current OEB formula for establishing ROE is no longer appropriate, as it is adjusting ROE downward when in the expert’s view ROE should actually be increasing.

C1-SEC-22

[C1-1-1, Attachment 1, p.5,23,25] Please provide a complete list of the “equity and credit analysts” interviewed, and in each case provide either a CV or a link to a bio on their employer’s website.

C1-SEC-23

[C1-1-1, Attachment 1, p.5,23,26] Please provide citations since 2017 (other than the Scotiabank report cited) of academic or technical papers showing “the investment community’s view is that any regulatory risk differential between the countries has narrowed significantly, if not disappeared”.

C1-SEC-24

[C1-1-1, Attachment 1, p.7,33] Concentric concludes that “OPG faces an inherently increasing risk related to variability in generation output due to the aging of its nuclear stations”. Please show where any of the most recent filed Ratings Reports agree with that conclusion, or even refer to this risk at all.

C1-SEC-25

[C1-1-1, Attachment 1, p.8] Please confirm that Concentric disagrees with the OEB’s conclusion in EB-2016-0152 that if the output from OPG’s nuclear fleet is not increasing, the risk of OPG is not necessarily increase just because of increasing nuclear rate base.

C1-SEC-26

[C1-1-1, Attachment 1, p.9, 36, 60] Concentric concludes that the freeze of the hydroelectric payments amount will result in an increase in OPG’s financial risk in two ways: a) by increasing the pressure on OPG to manage inflationary increases in cost, and b) by increasing the differential in revenue value per MWh between nuclear and hydroelectric generation. Please quantify the extent to which this is factored into the expert’s proposal to increase OPG’s equity thickness by 5%. Please estimate the increase to the equity thickness the expert would propose without these factors.

C1-SEC-27

[C1-1-1, Attachment 1, p.27] Please provide the name, affiliation, and CV of the analyst who “commented that the equity thickness and ROE in Ontario are inferior to many other jurisdictions, especially those in the U.S. While this difference historically was acceptable, the analyst saw the improving regulatory framework in the U.S. as cause for concern that the equity thickness and ROE in Ontario could lead to challenges in incenting capital to flow to the province.”

C1-SEC-28

[C1-1-1, Attachment 1, p.28] Please provide an analysis and table, in the same format as EB-2016-0152, Ex. K18.4, p. 28-31, with the most recent three years of data available to Concentric.

C1-SEC-29

[C1-1-1, Attachment 1, p. 29] With respect to the differences between the cost of capital in Canada and the U.S.:

- a. Please provide an analysis of the extent, if any, to which the 13.4% increase 2017 to current in the TSX Index vs. the 51.3% increase in the S&P 500 Index over the same period, should be reflected in estimates of the relative cost of equity capital in Canada and the U.S.
- b. Please provide an analysis of the extent, if any, that the consistently lower government and utility bond yields in Canada vs. the U.S. over the 2017 to 2020 period should be reflected in estimates of the relative cost of equity capital in Canada and the U.S.

C1-SEC-30

[C1-1-1, Attachment 1, p.33] Please confirm that the most recent filed Ratings Reports generally conclude that OPG has no significant climate change risk in its regulated operations, but does have some climate change risk in its unregulated operations [e.g. A2-3-1, Attachment 6, p.7]. Please reconcile the Concentric view that OPG faces increased climate change risk with the most recent filed Ratings Reports.

C1-SEC-31

[C1-1-1, Attachment 1, p.34,62] Concentric concludes that “OPG’s financial risk will increase in the period from 2022 to 2026, as illustrated by the pressure on, and potential decline below current credit rating thresholds of, key credit metrics in the earlier years of the rate setting period”. Please reconcile this conclusion with:

- a. The forecast of S&P Global [A2-3-1, Attachment 11, p.2] that FFO to debt will be at 14-15%, and its conclusion that the FFO pressure is based on debt-funded acquisitions of unregulated assets.
- b. The forecast of Moody's [A2-3-1, Attachment 6, p.1-2,6] that CFO to debt will be 12-16%, and its similar conclusion that the prime cause of any decline is debt-funded acquisitions of unregulated assets.
- c. Moody's note [A2-3-1, Attachment 6, p.3] that a downgrade would only be likely if CFO/debt drops below 12% "on a sustained basis".
- d. The statement of DBRS [A2-3-1, Attachment 4, p. 1-2, 13] that "the cash flow to debt and debt to capital metrics are forecast to remain strong...", and its conclusion that "should OPG pursue acquisitions that result in a significant shift in the EBITDA mix between regulated and nonregulated operations or lead to credit metrics deteriorating to a level no longer supportive over the current rating category, DBRS Morningstar may take negative rating action."

C1-SEC-32

[C1-1-1, Attachment 1, p. 34-5,58] Please provide a rate base, capital additions, and depreciation continuity table for the regulated hydroelectric stations over the period 2022-2026 showing the forecast of \$2.0 of capital spending, demonstrating how it is "being made primarily to replace aging infrastructure and upgrade/develop certain sites", and showing that by 2026 regulated hydroelectric will have a rate base of \$8.9 billion, 40% of the total rate base of OPG.

C1-SEC-33

[C1-1-1, Attachment 1, p. 46] Concentric concludes that the aging nuclear units "face an inherent risk of experiencing increased effects of aging on their operations and output". With respect to this conclusion:

- a. Please reconcile this conclusion with OPG's forecasts of nuclear repair and maintenance costs and forced loss rates in 2022-2026.
- b. Please identify where, in A2-3-1, Attachments 4, 6 or 11, the most recent reports of the rating agencies flag a similar risk.

C1-SEC-34

[C1-1-1, Attachment 1, p.51] With respect to the National Capital Commission report cited in footnote 71, please confirm:

- a. The report forecasts using the IPCC intermediate (RCP4.5) and worst-case (RCP8.5) scenarios.
- b. The report forecasts (p. 33) annual precipitation over the 2020 to 2050 period to increase by 3% under the intermediate scenario (921 mm to 949 mm) and 5% under the worst-case scenario (921 mm to 968 mm).
- c. The report forecasts no significant increase in annual precipitation prior to 2030 in either scenario.
- d. The report specifically declines (p. 71-2) to issue any forecast of additional flooding on the Ottawa River over any period out to the end of the century.

C1-SEC-35

[C1-1-1, Attachment 1, p.51] Please provide a table from 2000 to 2020 showing the relationship between increasing lake water temperatures in Lake Ontario and "lower output through unit derates" for nuclear stations.

C1-SEC-36

[C1-1-1, Attachment 1, p.52] Please comment on whether the increasing push to a lower carbon future could result in reduced opposition to nuclear power amongst the public because it is a carbon zero fuel.

C1-SEC-37

[C1-1-1, Attachment 1, p.54] Please provide specifics of why Concentric believes that the impacts of climate change on OPG's regulated operations will make it a more risky investment relative to other investments that would be of interest to the same investors.

C1-SEC-38

[C1-1-1, Attachment 1, p.59] Please restate Figure 11 so that, similar to Figure 10, it shows the percentage of TWh. for nuclear for each year, and for each of the prior and upcoming rate periods. Please confirm that the percentage of nuclear output in the 2017-2021 period is forecast at 56.7%, and is expected to decline in the 2022-2026 period to 47.5%. Please confirm that the percentage of nuclear output in 2017 was 57.0%, and that is expected to decline to 39.4% in 2026.

C1-SEC-39

[C1-1-1, Attachment 1, p.63] Please explain why no government-owned utilities were included in the proxy group.

C1-SEC-40

[C1-1-1, Attachment 1, p.70] Please explain what the term "Strong" means which it is used by S&P to describe business risk.

C1-SEC-41

[C1-1-1, Attachment 1, p.75] Please provide a quantitative comparison to show that OPG has historically recovered a lower percentage of its deferral and variance accounts than other electric utilities in Ontario.

C1-SEC-42

[C1-1-1, Attachment 1] Please reconcile Concentric's conclusion that "OPG's risk profile will increase materially" with:

- a. The statement by S&P Global [A2-3-1, Attachment 11, p.1] "We are also revising upwards our business risk profile on OPG to strong from satisfactory".
- b. The statement by Moody's [A2-3-1, Attachment 6, p.4] "OPG's strong business risk profile is driven by its high proportion of regulated and contracted cash flow".

C1-SEC-43

[C1-1-1, Attachment 1] Please reconcile Concentric's conclusion that OPG's equity thickness should be increased from 45% to 50% with the DBRS rating [A2-3-1, Attachment 4, p.10] of the Deemed Equity of OPG, at 45%, as Good, the second highest of five levels of rating.

C1-SEC-44

[C1-1-1, Attachment 1] Please confirm that Concentric is recommending an increase from 45% equity to 50% equity for all of the prescribed facilities, nuclear and hydroelectric. Please confirm that, because of the freeze of the hydroelectric payment amounts, the Applicant is proposing that this increase only be applied to the nuclear rate base, and that the increase that would otherwise be applicable to the hydroelectric rate base will not be collected by OPG, directly or indirectly, for the period 2022-2026.

C1-SEC-45

[C1-1-1, Tables 1-11] Please confirm that the increase in the after-tax cost of nuclear equity for 2022-2026 is \$844.1 million (\$1,148.4 million grossed-up), of which \$400.0 million (544.1 million grossed-up) is the result of the proposed increase in equity thickness from 45% to 50%.

C1-SEC-46

[C1-1-2, Table 12] Please confirm that the actual cost of interest on long term debt applicable to the regulated hydroelectric facilities for the period 2022-2026 is forecast to be approximately \$130 million lower than the interest cost embedded in rates for that period.

C2-SEC-47

[C2-1-1, p.1] Please describe in detail all actions OPG can take to ameliorate the \$1,192.1 million cost associated with the Bruce facilities over the test period.

C2-SEC-48

[C2-1-1, p.3] Please provide the 2020 audited financials of OPG as soon as they are available.

D2-SEC-49

[D2-1] After the Board made certain disallowances to the proposed 2017-2021 nuclear capital budget in its Decision and Order in EB-2016-0152, please explain how OPG modified its capital plan to account for the revised amounts approved by the Board. In your response, please not only explain the specific modifications made, but also the process taken to come to the changes.

D2-SEC-50

[D2] With respect to nuclear capital:

- a. Please provide a list of specific productivity initiatives that have or will be been implemented between 2017 and 2021 and quantify the annual capital savings achieved. Please provide details regarding how the savings were calculated.
- b. Please provide a list of specific productivity initiatives that OPG is planning to undertake between 2022 and 2026 and quantify the annual capital savings forecasted. Please provide details regarding how the savings were calculated.

D2-SEC-51

[D2-1] For each material project that was completed between 2017 and 2021, please provide a copy of the Lesson Learned document.

D2-SEC-52

[D2-1-1, p.5] With respect to the BCS component of OPG's project planning process:

- a. Does the use of the term "Business Case Summary" indicate that there are more detailed business case for projects? If so, for what types of projects would there be a more extensive business case? Please provide as an example of a more detailed business case other than the DRP.
- b. [Figure 2] For any given project, does OPG require approval of 3 separate BCS' at each of the G1, G2 and G3 stage?
- c. In a number of the BCS documents included in the application funds are released in steps (i.e. partial release). Please provide further details regarding this process, for example, when does OPG determine a partial versus full funding release is appropriate, how does it determine the amount of a funding to be released at any given time, etc. Please provide examples to help illustrate.

- d. In a number of BCS documents included in the application, there is either no total project costs included (e.g. D2-1-3, Attach 1, Tab 45) or a range is provided (e.g. D2-1-3, Attach 1, Tab 47). Yet, the total project cost has been included in this application. Please explain why a specific total project is not included in a BCS, and in situations where it is not included, how did the Applicant determine the project costs for the purposes of this Application?

D2-SEC-53

[D2-1-1, p.7] OPG notes that “[t]he “Value Framework” provides quantitative means to evaluate each asset investment option’s benefit and costs with reference to the ability to mitigate key risks”:

- a. Please provide any internal guide, rubric, or similar document that explains how the benefits, costs, and risk are to be calculated.
- b. Please provide a list of investments that had a Value Framework option applied to and included in this application. For each investment, please provide all options (and note the selected option) and their individual net benefit, cost, and risk scores across each of the seven areas.
- c. For all projects included in this application that the Value Framework was not used, please explain why not.
- d. Is the Value Framework information included in the BCS? If not, please explain why not.

D2-SEC-54

[D2-1-1, p.8] With respect to Project Prioritization:

- a. Does OPG use any quantified risk-based mechanism to prioritize projects? If so, please provide details. If not, please explain why not.
- b. Please rank all nuclear projects included in this application by prioritization.

D2-SEC-55

[D2-1-1, p.10] OPG notes that it has Extended Service Master Services Agreements (“ESMSA”) with three vendors:

- a. Please list the three vendors and how they were selected.
- b. Please explain the process of how work is allocated amongst the three vendors.
- c. Please detail the major terms of the ESMSAs.
- d. Are these ESMSAs generally similar amongst the three vendors? If not, please explain the areas where they differ.
- e. What is the term of the ESMSA and how often does OPG seek new EPC contractors?

D2-SEC-56

[D2-1-1, p.13] In the evidence, OPG notes that the estimating of nuclear project costs and schedules was enhanced in 2018. Please explain in greater detail the changes made to the estimating process in 2018. If possible, please provide illustrative examples of how a nuclear project would have been estimated before and after the 2018 changes.

D2-SEC-57

[D2-1-1, p.13] OPG notes that it made changes in 2020 to move to a scaled delivery model which provides for a common project valuation method. Please explain what a scaled delivery model is and what the common project evaluation method that is used. Please provide a copy of any overarching internal guides that are used to explain this delivery model within the company.

D2-SEC-58

[D2-1-1, p.13] The Applicant notes the changes it made in awarding new work after the Board's Decision and Order in EB-2016-0152:

- a. Please provide further detail of these changes and if possible, please use example(s) to explain how work was allocated before and after the changes.
- b. Please provide a copy of any overarching internal guide that is used to explain this approach to allocating work.
- c. Are the vendors who are being allocated work in the context of this new approach, limited to those which OPG has an ESMSA with, or is broader?

D2-SEC-59

[D2-1-1, p.8] With respect to project execution:

- a. Please detail the type of monitoring of project execution, including that of project costs and schedules, that occurs at OPG, not only at the project level, but at each level, up to and including the Board of Directors.
- b. Please detail the metrics that are used to monitor project execution at each level at OPG.
- c. Insofar as it may be different then your responses to parts (a) and (b), please detail the method of reporting on project execution within the company.
- d. Please provide copies of the latest version of any nuclear capital project execution monitoring reports, summaries, dashboards, metrics or similar documents, at each level within OPG.

D2-SEC-60

[D2-1-1, Attachment 2] With respect to the KPMG, "Ontario Power Generation Project and Modifications Project Management Audit Report":

- a. Was KPMG selected by way of a competitive process? If not, please explain why not.
- b. Please provide any briefing documents that were provided to KPMG regarding OPG's project management processes and procedures.
- c. [p.46] Please provide a copy of documents provided under the categories of, 'Presentation', 'PM Procedures' and 'Project Basic Info'.
- d. [p.52] For each project that was included in the audit, please provide a copy of the Project Basic Information table.
- e. [p.52] For each project that was included in the audit, please provide OPG's response to the request from KPMG included in response to request 3(a).

D2-SEC-61

[D2-1-2] Please provide tables 4a-5b in Excel format.

D2-SEC-62

[D2-1-3] Please provide tables 1a-1c and 2a-2g, 4a-4b in Excel format.

D2-SEC-63

[D2-1-3, Table 1a] Please explain the difference between Total Project Cost (g) and Total In-Service (k).

D2-SEC-64

[D2-2-11, Attach 3] With respect to the Bates Whites Economic Consulting, *Construction Cost Estimate for the Darlington Nuclear Generation Station D20 Storage Project* Report:

- a. Was Bates Whites Economic Consulting ("Bates Whites"), selected by way of a competitive process? If not, please explain why not.
- b. What project design and schedule did Bates Whites use for its cost estimate?

- c. Please confirm that Bates Whites is not opining on the prudence of the actual costs OPG incurred to construct the D20 Storage Project.

D2-SEC-65

[D2-2-2, p.11] With respect to the DRP:

- a. Please provide a status update on the DRP since the filing of the application.
- b. Please provide the most recent update provided to OPG's Board of Directors regarding the DRP.
- c. Please provide an up to date (at least to the end of Q1 2021) version of Figure 1 and Table 6 included the DRP Annual report (see D2-2-2-2, Attachment 2, p.10-11).
- d. Please provide the 2020 version Darlington Refurbishment Program Annual Report

D2-SEC-66

[D2-2-2] With respect to the Schedule Performance Index (SPI) and Cost Performance Index (CPI):

- a. Please provide the current SPI and CPI metrics.
- b. Has OPG made any changes to the baseline cost and schedule for the purpose of calculating the SPI and CPI metrics since EB-2016-0152. If so, please provide details.

D2-SEC-67

[D2-2-2, p.11] OPG states that it brought in-service \$70.3M of projects earlier than forecast because they provided immediate benefit to the Darlington Station. Please provide details of the projects and how they brought a benefit to Darlington Station (as opposed to just the DRP) at the time they were completed (and brought in-service).

D2-SEC-68

[D2-202, p.12] Throughout the evidence OPG states that compared to the U2EE, the DRP Project is "on budget". How does OPG define as "on budget"?

D2-SEC-69

[D2-2-2, Attachment 2] Please provided updated versions of all the tables and figures included in the Darlington Refurbishment Program Annual Report reflecting data up and completing the completion of Unit 2.

D2-SEC-70

[D2-2-2, Attachment 2, p.14] OPG's actual FTE resources dedicated to the DRP is significantly higher than forecast at RQE. Please explain the driver of the need to increase OPG resources as compared to the forecast.

D2-SEC-71

[D2-2-3, p.9] Please provide a copy of the information provided to the OPG Board of Directors in which the approval of the deferment of Unit 3 to September 2020 was approved.

D2-SEC-72

[D2-2-3, p.11] Please provide details regarding any material contract management and performance issues OPG had with its contractors to date related to the DRP (excluding those related to the D20 Storage Project). Please provide details regarding how OPG has or plans to remedy and/or mitigate those issues.

D2-SEC-73

[D2-2-3, p.15] Please provide a list of all Tier 0 and 1 Lessons Learned.

D2-SEC-74

[D2-2-4, p.6-18] With respect to the RFR EPC Contract Amendments:

- a. Please explain why Amendment 8 was required.
- b. Please explain why Amendment 9 was required.
- c. Please provide details regarding the outstanding commercial issues that led to the settlement discussion resulting in Amendment 11 and 12.
- d. Does the revised target cost of \$1,626M to \$1,724M include additional costs incurred as part of Unit 2?
- e. Did OPG have any third-party advice on the appropriateness of making changes to the EPC Contract? If so, please provide details and a copy of that advice.
- f. [p.11, Ft 11] OPG states “The \$1,700M incentive calculation metric reflects a fair allocation of risk for the Remaining Units’ work taking into account the execution phase target cost and OPG’s available contingency for the Remaining Units’ refurbishments.” Please explain in greater detail why OPG believes this is a fair allocation of risk.

D2-SEC-75

[EB-2016-0152, D2-2-3, p.12-14] SEC seeks to better understand the impact of the amendments made to the RFR EPC Contract:

- a. Please provide revised versions of Tables 4-7 using the revised target price and contractual pricing arrangements.
- b. Please provide revised versions of Tables 4-7 using the revised target price but only contractual arrangements in place as of the EB-2016-0152 proceeding.

D2-SEC-76

[EB-2016-0152, L-4.3-2 AMPCO-69] SEC seeks to understand changes in the DRP risk since the last application:

- a. Please provide an updated response in the same format as AMPCO IR #69 (EB-2016-0152) in Chart 1 and 2.
- b. Please explain the drivers of the changes.

D2-SEC-77

[D2-2-4, p.21] OPG states that it awarded the TG stator re-win and centerline scope to General Electric and de-scoped the work for Unit 3 from CanAtom:

- a. Please provide the cost to OPG of GE doing the work.
- b. Please provide the reduction of OPG’s costs payable to CanAtom through amendments to the TG Engineering Procurement and Construction Agreement due to the de-scoping of the work.

D2-SEC-78

[D2-2-6, p.6, Chart 1] Please provide a similar table using the same program elements, the Unit 2 contingency included as part of the U2EE forecast, compared to the actual contingency used.

D2-SEC-79

[D2-2-7, p.6] With respect to the impact of COVID-19 on the DRP:

- a. OPG states that at the time of the U3EE the estimate of the COVID-19 impact on the DRP was \$150M. Please provide an updated forecast.
- b. Please explain and provide a breakdown of the revised forecast identified in part (a).
- c. Please explain what operational changes OPG had made to the DRP as a result of COVID-19.

- d. Please explain why OPG proposes to track the impact of COVID-19 in the CRVA and not in Account 1509.

D2-SEC-80

[D2-2-7, p.9, Chart 2] Please provide a revised version of Chart 2 that includes Unit 2 U2EE forecast costs and Unit 2 actual costs. Please also provide the revised chart in Excel format.

D2-SEC-81

[D2-2-7, p.13, Chart 3] Please explain why the OPG Project Management costs increase both in absolute dollars and a percentage of execution phase costs for each subsequent unit after Unit 2.

D2-SEC-82

[D2-2-7, Attachment 2, p.21] Burns/Modus list a number of opportunities for management to consider in refining the U3EE. Please explain, if and how, these opportunities were implemented by OPG. If they were not implemented, please explain why not.

D2-SEC-83

[D2-2-7, Attachment 3, p.26-27] Burns/Modus list a number of major risk areas and recommendations:

- a. Please explain how OPG has mitigated each of the listed major risks.
- b. Please explain if, and how, OPG has implemented the identified recommendations. If they were not implemented, please explain why not.

D2-SEC-84

[D2-2-8; EB-2016-0152-L-4.3-1, Staff-72] Please provide a copy of all third-party and OPG internal audit oversight reports regarding the DRP that have not been filed in the application and were not filed on the record in EB-2016-0152.

D2-SEC-85

[D-2-2-8, p.19] With respect to the decision to have the Refurbishment Construction Review Board (“RCRB”) provide independent oversight to the OPG Board of Directors instead of Burns/Modus:

- a. How often will the RCRB meet on-site?
- b. How often were Burns/Modus on-site?
- c. What is the annual cost of the RCRB?
- d. What was the annual cost for the services of Burns/Modus?
- e. Please explain all differences between having RCRB conducting independent oversight to the OPG Board of Directors as opposed to Burns/Modus.
- f. Please provide a copy of all material provided to the OPG Board of Directors relating to the decision to have the RCRB takeover oversight of the DRP from Burns/Modus.

D2-SEC-86

[2018 Auditor General of Ontario, 2018 Annual Report, Chapter 3, Section 3.02 - Darlington Nuclear Generation Station Refurbishment Project] With respect to the Auditor General of Ontario’s 2018 Report (“Report”) regarding the DRP:

- a. Please place a copy of the Report on the record.
- b. Please list each of the recommendations and an update on the status of their implementation.
- c. Please provide a copy of any briefing materials provided to the OPG Board of Directors regarding the Report.

D2-SEC-87

[D2-2-11, Attachment 1] With respect to the Testimony of Dr. Patricia D. Galloway (Pegasus Global Holdings Inc):

- a. [p.30] Is it Ms. Galloway's view that reduced oversight is required in the execution phase as compared to the planning stage of a mega-project?
- b. [p.30] What is Ms. Galloway's understanding of the difference in roles between Burns/Modus and the RCRB?
- c. [p.30] Is Ms. Galloway aware of a mega-project the size and complexity of the DRP reducing its third-party oversight during the execution of the project?
- d. Based on Ms. Galloway's review, does she have any recommendations for OPG to improve the safety, scope, cost, schedule, and quality of the DRP?

D2-SEC-88

[D2-2-11, Attachment 1, p.32] In the Testimony of Ms. Galloway she notes that there has been a re-alignment within OPG as of September, 2020. Please provide further details regarding this re-alignment.

D2-SEC-89

[D2-2] Please provide a copy of all third-party and OPG internal audit oversight reports regarding the D20 Storage Facility.

D2-SEC-90

[D2-2] Please provide a copy of all materials provided to the OPG Board of Directors relating to the D20 Storage Project.

D2-SEC-91

[D2-2-10, p.6] The evidence states that D20 Storage Project is used to support the operation of the TRF which is required to operate Ontario's nuclear facilities including the Bruce Power Nuclear General Stations. How does Bruce Power compensate OPG for the additional costs OPG is incurring to construct the D20 project?

D2-SEC-92

[D2-2] Please confirm that it is OPG's position that even with all the problems that occurred regarding the D20 Storage Project outlined in its evidence, the entire cost was prudently incurred.

D2-SEC-93

[D2-2-10, p.13] OPG states that "[t]he \$160M placed in service in 2016 represents the costs of the seismic dike, five PHT storage tanks and the piping and equipment necessary to allow them to receive heavy water if required." Were any of these used to receive water before the bulk of the project was put in-service in 2019? If so, please provide details.

D2-SEC-94

[D2-2-10] Please provide a table that shows each change in the forecast D20 Project costs over-time. The table should include for each difference cost estimate, a) date of the estimate, b) the cost estimate, c) entity who provided the cost estimate/forecast, d) general contractor at the time, e) total cost that had been expended at that time, and f) description of the cause of the change of the estimate/forecast, g) evidentiary references (as applicable).

D2-SEC-95

[D2-2-10, p.67] Please provide details regarding what is included in the ESMSA scorecard. Please provide an example.

D2-SEC-96

[D2-2-10, p.69] With respect to the termination and settlement with Black & McDonald (B&M):

- a. Please provide copies of the termination letter(s) that were sent to B&M which sets out OPG's reasons for termination.
- b. Please provide copies of any responses that OPG received related to any termination letter(s) sent to B&M, which would outline any views they had with respect to any positions taken by OPG.
- c. Please provide a copy of the Settlement Agreement between OPG and B&M.

D2-SEC-97

[D2-2-10] Please confirm CanAtom was formerly known as the as the SNC Lavalin/Aecon JV.

D2-SEC-98

[D2-2-10, p.78-79] With respect to the 2014 selection of a new EPC contractor:

- a. Please explain the weighting of the criteria used.
- b. Please explain why OPG decided to negotiate with both bidders, if the pricing proposal from both respondents were deemed-non-compliant. Please explain why OPG did not require both respondents to submit complaint pricing bids.

D2-SEC-99

[D2-2-10, p.82] Please provide a copy of the referenced acceptance memo.

D2-SEC-100

[D2-2-10, p.91] OPG's evidence is that it agreed to accept \$7.5M of responsibility for CanAtom claims related to scope or estimation issues. Please explain what specific scope and estimation issues OPG was agreeing to take responsibility over.

D2-SEC-101

[D2-2-10, p.92] The evidence is OPG told CanAtom in 2017 that it was "obtaining a third party review of the need for the redesign". Did OPG ever undertake that third-party review? If so, please provide details.

D2-SEC-102

[D2-2-10, p.93] The evidence is that High Bridge's cost estimate to complete the project in March 2017 was \$99.5M, plus \$9m for contingency. What was the CanAtom cost estimate at the time and what was the actual cost to complete the project?

D2-SEC-103

[D2-2-10, p.93] Please provide a copy of the notification provided to CanAtom "that it was prepared to terminate the PO for cause and instructed CanAtom to halt work on the project." Please provide a copy of any CanAtom response.

D2-SEC-104

[D2-2-10, p.93] OPG's evidence is that in 2017 it considered three alternatives for completing the project and that it ultimately chose the option of having CanAtom complete the project. Please provide any contemporaneous documents that were provided to decision-makers that outline the various options and any that recommended the course of action to have CanAtom complete the project.

D2-SEC-105

[D2-2-10, p.95] Please provide a copy of the referenced June 27, 2017 Settlement Agreement between OPG and CanAtom.

D2-SEC-106

[D2-2-10, p.98] OPG's evidence states that: "By October 2017, CanAtom was behind on the scheduled tasks. CanAtom attributed its lack of progress to resource constraints related to the availability of skilled trades. OPG required CanAtom to increase its project supervision in an effort to get the work on track. OPG extended the completion date for the summer work until February 2018 and added new tasks and performance gates." What was OPG's assessment *at the time* of CanAtom's reason for its scheduling delay? Please provide a copy of any contemporaneous documents regarding OPG's assessment.

D2-SEC-107

[D2-2-10, p.99] OPG's evidence is that by April 2018 CanAtom's performance was raising concerns about its ability to deliver the project on schedule:

- a. At the time, did OPG re-assess the alternatives considered in 2017? If not, please explain why not.
- b. Please provide a copy of any contemporaneous document that outlines OPG's concerns at the time.

D2-SEC-108

[D2-2-10, p.102] OPG's evidence is that CanAtom calculated its loss on Phase 2 work at approximately \$77M as of year-end 2019. Please provide a copy of the estimate.

D3-SEC-109

[D3-1-2, p.2] With respect to Cyber Security – CSA N290.7 Project:

- a. Please provide a breakdown of the estimated cost of \$40.7M.
- b. Please provide the most recent business case for the project.

D3-SEC-110

[D3-1-2, 2; D3-1-2, Attachment 1] With respect to the 700 University Workplace Transformation Project:

- a. Please provide a detailed breakdown of the full costs of the project.
- b. What is the total cost of the project, including amounts funded by way of the tenant inducement allowance?
- c. [Attach 1, p.2] Each of the 3 options includes a NPV calculation. Please provide the full underlying NPV calculations including all assumptions made.

D3-SEC-111

[D3-1-2, Attachment 2] With respect to the Clarington Corporate Campus Project:

- a. Is there a more detailed project proposal and business case that exists for this project? If so, please provide copies.
- b. Please provide a detailed breakdown of the forecast costs of the project and how they were estimated.
- c. Please provide details regarding the procurement method for the project.
- d. [p.6] The Applicant provides a cost and NPV calculation for the various alternatives. Please provide the full underlying cost breakdown and NPV calculations, including all assumptions made, for each alternative.
- e. When the Project is completed, what is the forecast annual revenue requirement (allocated to both regulated nuclear and hydroelectric), including both capital and OM&A portions?
- f. Please provide a list of current OPG facilities that the proposed project will replace, the total annual savings, and the amount of savings that would be allocated to OPG's regulated business.

D3-SEC-112

[D3-1-2, p.9] With respect to the Overhaul of the Darlington Energy Complex Second Floor Project:

- a. Please provide the business case for the project.
- b. Please provide a breakdown of the \$10.2M project cost.

D3-SEC-113

[D3-1-2, p.6] With respect to the OPG Telephone Upgrade Project:

- a. Please explain how removing fixed telephone lines at 700 University and replacing them with Skype costs \$6.5M.
- b. Please explain why is OPG physically removing the telephone lines.
- c. Please provide the estimated annual savings of removing a fixed telephone service.
- d. [D3-1-2] Please provide a revised versions of Tables 2a, 2b, and 4 that show the amounts allocated to nuclear.

E3-SEC-113

[E2-1-1, p.4] Please update Chart 2 to include 2020 actuals.

E3-SEC-114

[E2-1-1, p.6] SEC seeks to understand the impact COVID-19 has had on the OPG's nuclear production:

- a. For each of the 2020 and forecast 2021 production forecast, please explain each material event that had an impact on the production forecast caused by COVID-19 and the specific impact on production both in terms of days and also in TWh.
- b. Please also explain, how, if any impact outlined in part (a) results in a change to the 2022 to 2026 production forecast as compared to a no-COVID-19 scenario.

E3-SEC-115

[E2-1-1, Table 1] Please update Table 1 to include 2020 actuals.

E3-SEC-116

[E2-1-2, Table 11] Please update Table 1a to include 2020 actuals.

F2-SEC-117

[F2-1-1, p.11, Chart 2] Please provide similar charts for years 2016, 2017, 2018 and 2020.

F2-SEC-118

[F2-1-1, p.16-17] Please provide a similar table that shows the annual targets for each of Pickering and Darlington for each year between 2016 and 2019.

F2-SEC-119

[F2-1-1 p.22-23] With respect to the Right Work, Right Time, Right Value initiative:

- a. For each listed action, please quantify the forecast annual savings expected.
- b. Please provide the internal business case, program outline, or similar document that outlines the initiative and expected benefits. Please explain each calculation and any assumptions made.
- c.

F2-SEC-120

[F2-1-1, Attachment 1] For each of the referenced six prior initiatives, please quantify in monetary terms the benefits listed. Please explain each calculation and any assumptions made.

F2-SEC-121

[F2-1-1, Attachment 2] Please provide the 2017, 2018 and 2019 Nuclear Benchmarking Report.

F2-SEC-122

[F2-1-1, Attachment 4] With respect to the ScottMadden, Methodology to Adjust For Refurbishment and Validation of Implementation Report, please confirm that Scenario 4 assumes that the costs scale in a linear fashion with the number of Operating Units. If confirmed, please explain why this is appropriate and how ScottMadden validated this approach.

F2-SEC-123

[F2-1-1, Attachment 5] With respect to the ScottMadden, A Study of Factors Impacting TGC / MWh Performance with Normalizing Adjustments to Facilitate Closer Comparison Report:

- a. Has ScottMadden undertaken a similar econometric analysis for nuclear facilities before? If so, please provide details.
- b. With respect to each of the charts contained on pages 4, 10 and 13:
 - i. Please provide the information tabular format in Excel.
 - ii. Please breakdown the information for each of 2015, 2016 and 2017, and provide the information in the same format as request in part (i).
 - iii. Please provide updated information for each of 2018 and 2019, and provide the information in the same format as request in part (i).

F2-SEC-124

[F2-1-1, Attachment 6] With respect to the Goodnight Consulting, 2019 Nuclear Staffing Benchmarking Analysis Report:

- a. What is the date of the information from OPG and the benchmark peer group?
- b. Please provide a table that shows the peer group used in each of the 2011, 2013, 2014 and 2019 reports.
- c. [p.16] The Report notes that information management was not benchmarked as it was done via a different method external to the study. Was this a decision made by Goodnight or OPG?
- d. [p.19] Please revise the table to show 'Total OPG FTE' and '2019 Benchmarks' broken by i) Darlington, ii) Pickering 1-4, and iii) Pickering 5-8. Please provide the response in Excel format.
- e. [p.20] Please provide OPG's views on what are the likely drivers for the functions with the largest variances from the benchmark (both positive and negative).
- f. [p.20] For each function, please indicate if the numbers of the FTE have changed as a result of the DRP (i.e. less FTEs are required in 2019 as a result of Unit 2 being out of service).
- g. [p.36] How was the PWR to CANDU adjustment determine and has that adjustment changed since the previous benchmarking study. If it has changed, please provide details.
- h. [p.42] What would the benchmark total for each of Darlington, Pickering 1-4 and Pickering 5-8, if no 35-hour work week adjustment was made.
- i. Please provide a copy of the questionnaire that Goodnight provided to the peer group.

F2-SEC-125

[F2-1-1] Please update the following tables for 2020 actuals (as applicable) and provide in Excel format: Tables 1 and 2.

F2-SEC-126

[F2-2-1] Please update the following tables for 2020 (as applicable), and provide in Excel format: Tables 1 and 2.

F2-SEC-127

[F2-2-2] Please update the following tables for 2020 (as applicable), and provide in Excel format: Tables 1a and 1b.

F2-SEC-127

[F2-3-3, Tables 1, 2a and 2b] Please revise the tables to include a column that shows Total Project Costs forecast in the EB-2016-0162 application.

F2-SEC-128

[F2-4-2] Please update the following tables for 2020 (as applicable) and provide in Excel format: Tables 1a and 1b.

F2-SEC-129

[F2-5-1, p.8] Please provide a copy of the referenced 2016 and 2018 internal reviews.

F2-SEC-130

[F2-5-1, Table 1] With respect to the Forecast Nuclear Fuel Costs:

- a. For each year between 2020 and 2026, please provide the total value of forecast fuel bundle costs that are covered by existing contracts.
- b. For forecast fuel bundle costs that are not covered by existing contracts, please explain how OPG forecast the costs.

F2-SEC-131

[F2-5-2] Please update the following tables for 2020 (as applicable), and provide in Excel format: Table 1a and 1b.

F2-SEC-132

[F2-6-1, p.2] Excluding amounts related to the DRP, for each of the three ESMSA vendors, how much over the last 5 years have they received from OPG? For each vendor, please breakdown the amount into work that was undertaken through a competitive versus sole sourced procurement.

F2-SEC-133

[F2-8-1] With respect to OPG's proposed costs related to SMR technology:

- a. Please provide a detailed breakdown of the forecast costs for OPG's plan to develop SMR at the Darlington site.
- b. Please provide a copy of the business case for the proposed spending.

F2-SEC-134

[F-3-2] Please update the following tables for 2020 (as applicable), and provide in Excel format: Tables 1a and 1b.

F3-SEC-135

[F3-1-1, p.6] OPG notes that in course of providing data to Hackett for the benchmarking study included in this application, it learned that it "had erroneously included certain costs that do not form part of Hackett's taxonomy" in the data provided for the benchmarking study included in the EB-2016-0152 application. Please provide further details regarding this error.

F3-SEC-136

[F3-1-3] Please provide a breakdown of forecast/actual costs related to this application regardless of the year they are incurred. Please provide a similar breakdown of costs for the EB-2016-0152 application.

F4-SEC-137

[F4-1-1, Attachment 1] For each of the proposed changes to recommended lives discussed in this report, please provide details of the vintages of the affected assets, and reconcile those vintages and the new recommended lives with the current forecast station EOLs.

F4-SEC-138

[F4-1-1, Attachment 1, p.17] Please provide a table showing all “existing Darlington assets with remaining lives shorter than the 30-year post refurbishment life assumption for the reactors”, together with the unamortized values of those assets, their remaining lives as currently assumed, and OPG’s current expectation as to when, if at all, they will be replaced prior to the EOL of the refurbished Darlington units.

F4-SEC-139

[F4-2-1, p.5] Please confirm that we understand the description of the accelerated CCA correctly. For the period 2018-2021, 100% of the impact has been or will be included in the Income and Other Taxes Variance Account. For hydroelectric, that same treatment will continue for 2022-2026. For nuclear, the forecast revenue requirements for 2022-2026 include application of the accelerate CCA in full. If this description is not correct, please provide a corrected description.

F4-SEC-140

[F4-2-1, p.11]- For each of the years 2011-2020, please provide the total amount of SR&ED ITCs claimed, broken down between nuclear and hydroelectric, and provide the actual amount allowed after audit or expiry of the statutory review period. Please provide the basis for continuing to recognize only 75% of the forecast claimed amount for rate-setting purposes, and refunding the balance later.

F4-SEC-141

[F4-2-1, p. 12-13] Please provide OPG’s current internal forecast of (100% of) SR&ED ITCs to be claimed in each of the years 2022-2026, broken down between nuclear and hydroelectric.

F4-SEC-142

[F4-3-1] With respect to the Ontario Public Sector Salary Disclosure List:

- a. For each of 2019 and 2020, what percentages of OPG’s employees were on the Ontario Public Sector Salary Disclosure List?
- b. For 2020, please provide the total number of OPG employees whose salaries are at or above, a) \$100,000, and b) \$200,000. Please provide similar information to employees allocated to the nuclear business.

F4-SEC-143

[F4-3-1, p.2] OPG notes that the last rounds of collective agreements with the PWU and Society were decided by an arbitrator’s award. Please provide a copy of those awards (decisions).

F4-SEC-144

[F4-3-1] Please provide detail of all changes that were made to the current collective agreement from the one filed in EB-2016-0152.

F4-SEC-145

[F4-3-1] Please provide a breakdown of the cost impact (additional cost and/or savings) from all changes in the collective agreements with the PWU and the Society since the last application, for each of the following time periods: i) the term of each collective agreement, ii) the test period, and iii) the total

impact if the change extends beyond the test period. Please detail all assumptions made and the full calculations. In your response, please provide similar tables included in response to Exhibit L, Tab 6.6, Schedule 15, SEC-072 in EB-2016-0152.

F4-SEC-145

[F4-3-1, p.4] SEC understands OPG has extended the current collective agreement with the PWU to March 31, 2021. If confirmed, please provide the details of the extension and how, if at all, it impacts the 2022 budget underlying this application.

F4-SEC-146

[F4-3-1, Attachment 1] With respect to Appendix 2-K:

- a. Please provide a revised version of the Appendix that includes, ii) 2020 actuals, ii) two additional rows that shows the total compensation costs allocated to OM&A and capital.
- b. Please provide an Excel version of the revised Appendix 2-K requested in part (a).

F4-SEC-147

[F4-3-1, Attachment 2] With respect to the Willis Towers Watson (“WTW”), Total Compensation Benchmarking Study (“Study”):

- a. For each of PWU, Society and Management, please provide a list of all types of potential categories of compensation that may be awarded, and what is and is not included in the Study.
- b. With respect to the Total Excluding Nuclear Authorized Category:
 - i. Please explain why WTW used a 75%/25% utility/general sample.
 - ii. Please explain the basis for the 50%/50% public/private sector weighting.
- c. For each of the Total Results by Job Family (Excluding Nuclear Authorized) Tables for PWU, Society and Management, please provide a table that shows for each ‘job family’ a comparison of the number of OPG Matched Incumbents to actual FTEs.

F4-SEC-148

[F4-3-1, Attachment 2] With respect to the Willis Towers Watson (“WTW”), Total Compensation Benchmarking Study (“Study”), for each of the Total Results by Job Family (Excluding Nuclear Authorized) Tables for PWU, Society and Management, please provide revised tables on a similar basis that show OPG compensation as compared to the following sample/peer groups:

- a. Total utility organizations
- b. Total general industry organizations
- c. Total private sector organizations
- d. Total public sector organizations
- e. Private sector utility organizations
- f. Private sector general industry organizations
- g. Public sector utility organizations
- h. Public sector general industry organizations

F4-SEC-149

[F4-3-1, Attachment 2] With respect to the Total Compensation Benchmarking Study: For each of the PWU and Society, please provide an estimate of the dollar difference between the weighted average total compensation for OPG’s employees allocated to its nuclear business and the P50 median used in the study. Please provide the amount for the year the study is representative of and for each year between 2022 and 2026. Please provide a step-by-step explanation of how the estimate was reached and include all supporting calculations so they can be verified.

F4-SEC-150

[F4-3-1, p.18] Please provide the Pension Contribution Ratio (Employee/Employer) used for the purposes of budgeted compensation costs for the 2022-2026 period.

F4-SEC-151

[F4-3-1, p.18; EB-2016-0152 Decision and Order, p.82] Please provide the pension and benefits contribution ratio, expressed a ratio between employer amount and employee (i.e. 2:1), for each year between 2017 and 2026. Please provide the breakdown of the calculation used for each year.

F4-SEC-152

[F4-3-1, p.21; EB-2016-0152 Decision and Order, p.82] In the Decision and Order in EB-2016-0152, the Board found that “OPG’s overall pension and benefits costs are clearly excessive, and it will make disallowances as described below.” Please explain what changes OPG has made to its pension and benefit costs since the EB-2016-0152 decision. Please quantify the changes.

G2-SEC-153

[G2-1-2-1a] Please update Table 1a to include 2020 actuals.

H1-SEC-154

[H1-1-1, p.18] Please provide a table comparing the forecast \$2 billion in hydroelectric capital additions annually to the proposed \$153 million annual reference amount, and provide a forecast of the balance in the Hydroelectric CRVA as of December 31, 2026.

H1-SEC-155

[H1-1-1, p.22] Please confirm that the orders of the Board in EB-2016-0152 were final orders. Please describe the legal basis for the proposed \$23.7 million additional charge to customers that is inconsistent with the EB-2016-0152 Payment Amounts Order.

H1-SEC-156

[H1-1-1, p.39] Please provide the full calculation of the “total revenue requirement impact associated with the changes being implemented as of December 31, 2020”, based on 2020 year-end actual information.

H1-SEC-157

[H1-1-1, Tables 1-16] Please provide revised versions of Tables 1-16 adding a column for 2020. In the case of Tables 1a and 1b, please add 1c showing the continuity from 2019 to 2020.

H1-SEC-158

[H1-1-1, Table 5] Please revise the Table 5 to show actual 2018 to 2020 information on a monthly basis.

I1-SEC-159

[I1-1-1, p.2] With respect to OPG’s actual regulated ROE:

- a. Please provide a detailed derivation of the OPG ROE amounts contained in Chart 1.
- b. Please provide a detailed explanation of the drivers, and their specific contribution to the variance, between the actual/forecast and deemed ROE for each year between 2017 and 2021.

Respectfully submitted on behalf of the School Energy Coalition this March 22, 2021.

Mark Rubenstein
Jay Shepherd
Counsel for the School Energy Coalition