3rd October, 2016

Matthew Kellway
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VIA Canada Post, email and RSS Filing

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge St.
Toronto, ON
M4P 1E4

Re: EB-2016-0152 Ontario Power Generation Inc. (OPG)
2017-2021 Payment Amounts Application
The Society of Energy Professionals ' Interrogatories to OPG

Dear Ms. Walli,

In accordance with Procedural Order No. 1, please find attached the Society of Energy Professionals' interrogatories to OPG in the subject proceeding.

Two (2) hard copies of these interrogatories have been sent to your attention.

Also please be informed that I should be added to the list of parties who are to receive all documentation and communication in this proceeding.

Sincerely,

[original signed by]

Matthew Kellway
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The Society of Energy Professionals
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copy: Interested parties

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INTERROGATORY QUESTIONS

EB-2016-0152 Ontario Power Generation Inc. (OPG)

2017-2021 Payment Amounts Application

3rd October 2016

EB-2016-0152: The Society of Energy Professionals' Interrogatory Questions

Issue 4 Capital Projects

4.0 Society 1
Exh. D4-1-1 p.1 "OPG capitalizes only those overhead costs that are directly attributable to the acquisition or construction of an asset."

a) Please comment on what factors or criteria OPG uses to determine which overhead costs are directly attributable to specific projects.

4.0 Society 2
Exh. D4-1-1 p.3 "OPG continues to apply the following thresholds for the materiality assessment …"

a) Please confirm that OPG's capitalization materiality thresholds are periodically reviewed for necessary adjustments due to inflation or other factors such as technological changes.
b) Are OPG's materiality thresholds periodically benchmarked with those used by other major North American utilities?

Issue 6.2 Is the nuclear benchmarking methodology reasonable? Are the benchmarking results and targets flowing from OPG's nuclear benchmarking reasonable?

6.2 Society 3
Ref Exh F2-1-1, p 11 "OPG continues to examine staffing levels as part of its benchmarking studies and anticipates that it will eliminate the Goodnight staffing benchmark gap to industry peers in 2016. "

a) Using 2014 actuals as the starting point please provide a table which shows the staffing changes in 2015 and 2016 which result in the "benchmark gap" being eliminated in 2016. Use the staffing categories provided in F2-1-1, Attachment 2, p9 for this table [either the data organized by OPG Business Group or the data as organized by Goodnight].
b) Will the 2016 year end staffing profile by categories provided in answer to a) be substantially maintained through 2017 until 2021 or will there be material changes made? In either case, please explain why.

6.2 Society 4
Ref Exh F2-1-1, p19 lns 4-17 Human Performance Initiative
F2-1-1, Attachment 1, p82 "18-Month Human Performance Error Rate" Chart
F2-1-1, p15 Chart 4 "Operational and Financial Targets"

a) Update the referenced chart provided in F2-1-1, Attachment 1, p82 with the 2015 actual and targets for Darlington and Pickering for 2016 to 2019.
b) Outline what the specific activities that will be focused upon in the Human Performance Initiative in 2016 to 2021.
c) Please provide the estimated annual cost for the Human Performance Initiative and estimated benefits for 2014 to 2021 as well as the reduced lost generation (in GWh) due to human error. Provide range estimates if more appropriate than point estimates.

6.2 Society 5
Ref Exh F2-1-1, p19 lns 19-27 Equipment Reliability Initiative

a) Please provide the definition of the Equipment Reliability Index ("ERI").
b) Please provide the Darlington and Pickering actual ERI's for 2012 to 2015 and the targets for 2016 to 2021. Explain and discuss the ERI trends for Darlington and Pickering.
c) Please provide an overview of the initiatives in People, Equipment and Processes that OPG is undertaking which are driven by insights that the ERI has provided.

6.2 Society 6
Ref Exh F2-1-1, p19 lns 29-32 & p20 lns 1-10 Outage Performance Initiative

a) Briefly outline projects other than MDS as well as process changes which are part of the Outage Performance Initiative in the test period.
b) What are the annual targeted reductions in Forced Extension to a Planned Outage ("FEPO") days in the test period for the Outage Performance Initiative?

6.2 Society 7
Ref Exh F2-1-1, p20 lns 12-31 Parts Improvement Initiative

a) Please explain the 19 deliverables by cross-functional teams involving Supply Chain, Engineering, Fleet Operations & Maintenance, and Work Management that are targeted by this initiative for completion over a period of three years.
b) Please outline the targeted improvements in the "Work Order with Material Request Execution" and "Need to Use Cycle Time (Plan to Complete) for Work Orders with Material Request" factors through the test period.
c) Provide the improvement OPG expects to see in the test period in the trend in the overall duration it takes to complete a job that require parts.

6.2 Society 8
Ref Exh F2-1-1, p21 lns4-12 Inventory Reduction Initiative

a) Please estimate the annual reduction through the test period of the capital invested in the inventory as well as the reduction the potential for additional in the growth of the inventory obsolescence provision which will result from this initiative.
b) Please estimate the annual reduction through the test period of warehousing requirements and related expenses which will result from this initiative.

6.2 Society 9
Ref Exh F2-1-1, p21 lns14-19 Workforce Planning and Resourcing Initiative

a) Please outline the fleet-wide resourcing strategy that is being implemented with this initiative.

6.2 Society 7
Ref Exh F2-1-1, Attachment 1, p10 "All Injury Rate" Chart

a) Please update the chart with the 2015 actuals and the OPGN targets for 2009 to 2021.
b) Please summarize briefly what steps OPG is taking to meet an All Injury Rate target in 2016 to 2021 which is substantially lower than its actual rate in 5 of the 6 past years.
c) Are DRP contractors included in the OPGN All Injury Rate? If not, explain why not and what target will apply to these staff.

6.2 Society 10
Ref Exh F2-1-1, Attachment 1, p50 "Rolling Average Forced Loss Rate " Chart (for Darlington and Pickering station not individual units thereof)

a) Please update the chart with the 2015 actuals and the OPGN targets for 2009 to 2021.
b) Please summarize briefly what steps OPG is taking to meet a Rolling Average Forced Loss Rate target in 2016 to 2021 which (with the exception of 2020 and 2021 Darlington) is substantially lower than its actual rate in the past six years.

6.2 Society 11
Ref Exh F2-1-1, Attachment 4 p3
"The FHERI [Fuel Handling Equipment Reliability Index, where higher values are best] Benchmark is 85. As the FHERI was created in 2015, there is no historical data available prior to 2015. In 2015, Pickering achieved a FHERI of 53 against a target of 63, while Darlington achieved a FHERI of 83 relative to a target of 78. "

a) Please explain why the 2015 Pickering index was lower than target.
b) What steps in particular are being taken to exceed the Pickering target in 2016 and beyond.
c) Is there anything in addition to or a particular focus on the 6 key processes identified on page 2 of the exhibit to ensure that Darlington meets or exceeds its targets in 2016 and beyond?

6.2 Society 12
Ref Exh F2-1-1, Attachment 4 p13
"The Days Based Maintenance initiative was successfully implemented at both Pickering and Darlington stations. Direct savings are approximately $4.5 million per year as a result of savings on shift premiums and compensation for VERT qualification. One time capital expenditures of $5.7M were incurred to install automated monitoring systems.
Secondary benefits from implementing this initiative are expected to include reduced employee fatigue, lower human performance error rate, less rework, and higher work task completion rates. "

a) Please estimate the annual total monetary value of the secondary benefits outlined in the sentence above.

Issue 6.6 Are the test period human resource related costs for the nuclear facilities (including wages, salaries, payments under contractual work arrangements, benefits, incentive payments, overtime, FTEs and pension costs, etc.) appropriate?

6.6 Society 13
<u>Ref: Exh F4-3-1 p6</u> "... in 2015, Nuclear attrition was at its highest level in years, with over 300 retirements" ("These retirements include only those reporting to the Nuclear organization directly. Attrition associated with support staff attributed to the prescribed nuclear facilities is not reflected in this number.")

a) Please provide a table showing Nuclear Direct Regular staff for 2013 until 2021 broken down by Management, Society, PWU and EPSCA trades. Exclude PWU "Term Employees" from the table.

b) In the table created in a), please provide annual actual and forecast retirements for 2013 until 2021 broken out by the four staff categories.
c) In the same table, please provide actual and forecast annual total attrition and attrition excluding retirement.

6.6 Society 14
<u>Ref Exh F4-3-1, Attachment 1</u> "FTE, Compensation and Benefit Information for OPG's Nuclear Facilities ("Appendix 2k") "

a) Please provide versions of this table for Regular staff only and Non-Regular staff only.

6.6 Society 15
Ref Exh F2-1-1, p13
"In 2015, actual FTEs were below budgeted FTEs primarily due to higher than planned attrition of Nuclear Operations regular staff, which, because of hiring lags, was managed through the use of non-regular staff, overtime and purchased services."

a) What is the typical hiring lag for Nuclear Operations regular staff?
b) What is the typical period of time for Nuclear Operations new hires to become "fully competent".
c) In 2015, what were the total contractor ftes and cost?

Depreciation
Issue 6.9 Is the proposed test period nuclear depreciation expense appropriate?

6.9 Society 16
Ref. Exh. C2-1-1 p.5 "This addition to net book value is known as ARC. ARC represents a substantial portion of the net book value of the Pickering, Darlington and Bruce nuclear facilities. Like other capital costs, the ARC is amortized over the useful life of these assets. This amortization gives rise to depreciation expense."

(a) With specific reference to Pickering NGS A & B (EOLs Dec. 31, 2020), please confirm that any debit entry resulting from future estimate changes affecting the ARC for periods past the station's end of life (EOL) date is initially to be made to current operations and not to depreciable capital (before any potential deferral in a regulatory account).
(b) Please comment on how station-level ARC adjustments will be handled once only one or two units of a multi-unit station are left in service at a particular date. For example, if only one unit is left in service, will the whole station ARC adjustment be attributed to that single unit's undepreciated capital value?

(c) At what point would OPG no longer treat ARC adjustments as capital adjustments given a PNGS EOL of 2020? For example, would OPG increase or decrease capital value in 2020 if an estimate change occurred in that year?
(d) Please confirm whether a new or existing deferral or variance account would be used to capture qualifying potential future adjustments to the PNGS ARCs in the post-EOL period.

6.9 Society 17
Exh. F4-1-1 p.2 "Depreciation and amortization rates for the various classes of OPG's in-service fixed and intangible assets continue to be based on their estimated service lives. The service life of an asset class is limited by the service life of the station(s) to which it relates. An average end of-life ("EOL") date is established for depreciation purposes for all units at a particular station, which is typically based on estimated EOL dates for each operating unit of the station.

a) Please comment on the appropriateness of continuing to depreciate nuclear assets based on a station EOL assumption when stations are approaching EOL.
b) Has OPG considered transitioning to unit-specific EOLs for depreciation purposes in such circumstances?

Deferral and Variance Accounts
9.4 Are the proposed disposition amounts appropriate?

9.4 Society 18
Exh. F4-1-1 p.2 "OPG is not proposing to record additions to this account during the test period. Rather, OPG is proposing to record additions to the Pension & OPEB Cash Payment Variance Account and the Pension & OPEB Cash Versus Accrual Differential Deferral Account. As described at Ex. F4-3-2, this approach is consistent with OPG's proposal to maintain the same treatment for pension and OPEB costs as that resulting from the OEB's EB-2013-0321 Decision, pending the outcome of the OEB's generic proceeding on pension and OPEB costs (EB-2015-0040)."

a) In the event that the OEB delivers its generic decision on EB-2015-0040 in early 2017, does OPG intend to update its position on the disposal of its affected pension and OPEB deferral and variance accounts in the test years?