



May 14, 2021

Ms. Christine Long
Registrar and Board Secretary
Ontario Energy Board
2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Re: Ontario Power Generation 2022 to 2026 Payment Amounts
Motions Day Hearing – AMPCO Interrogatories & Undertakings At Issue
Board File No. EB-2020-0290

Pursuant to Procedural Order #2 dated April 29, 2021, attached please find the AMPCO interrogatory or technical conference undertaking at issue, along with a paragraph for each explaining the reasons for wanting the information.

Best Regards,

A handwritten signature in blue ink, appearing to read "Colin Anderson".

Colin Anderson
President

Copy to: Ontario Power Generation Inc.

AMPCO Motions Day Issues

1. AMPCO Interrogatory #89 part c)

Reference: Exhibit L D2-02-AMPCO-089 (c)

Please provide a list of Project Managers (PM) for the D2O Storage Project over the course of the project. Please provide the years of experience of each PM and a list of the other projects they were managing simultaneously.

OPG Response

OPG declines to provide the requested information on the basis of relevance. The names and experience of project managers on the D2O Storage Project would not provide any useful information for determining the prudence of OPG's expenditures on this project.

AMPCO Response

The Auditor General determined that Prerequisite Project work for Darlington Refurbishment was assigned to OPG staff with limited relevant experience, and project management and oversight of contractors performing Prerequisite Project work were inadequate.¹ The D2O Storage Project is a Prerequisite Project. Modus and Burns found that Contractor Performance and OPG's Project & Modifications (P&M's) failure to actively manage the work resulted in cost overruns and continued schedule.² In response to OPG's termination letter, B&M stated "OPG project management on the project had never managed a construction project of this magnitude and it became apparent that they had little to no influence with the other OPG stakeholders to remove obstacles, secure access or obtain approvals to facilitate the B&M project team to proceed on time and within budget."³ The D2O project has been described as complex and first of a kind. Understanding the degree of project manager experience OPG assigned to the project, especially in the early days of the project when decisions greatly influence project cost and schedule, is reasonable and relevant to determining if OPG prudently managed the project. AMPCO is not seeking the names of the project managers. AMPCO is asking that OPG complete the following table which was provided at Refusals Day on April 23, 2021.

¹ STANDING COMMITTEE ON PUBLIC ACCOUNTS DARLINGTON NUCLEAR GENERATING STATION REFURBISHMENT PROJECT (SECTION 3.02, 2018 ANNUAL REPORT OF THE OFFICE OF THE AUDITOR GENERAL OF ONTARIO (42_1_PAC_Darlington_10122019_endocx.pdf P7) <https://www.ola.org/en/legislative-business/committees/public-accounts/parliament-42/reports/2019-dec-11-report-darlington-nuclear-generating-station-refurbishment-project-standing-committee-public-accounts>

² EB-2016-0152, Exhibit L Tab 4.3, Schedule 1 Staff-072, Attachment 5, Page 30

³ Exhibit L D2-02-SEC-096, Attachment 2, Page 3

Chronology of OPG D2O Project Managers

OPG Project Manager - Responsible for D2O Project (do not provide name)	Start date	End date	Years of OPG Experience	Years of Experience as a Project Manager	Number of Other Projects Managed Simultaneously during this period (list project number and name)
PM#1					
PM#2					
PM#3					
PM#4					
PM#5					
etc.					

2. AMPCO Interrogatory #100 & AMPCO Interrogatory #101

The reasons for wanting information related to AMPCO 100 & AMPCO 101 are the same and described below.

AMPCO Interrogatory #100

Reference: Exhibit L D2-02-AMPCO-100

OPG indicates an RFP was distributed to six potential proponents in May 2011. The RFP sought engineering services for all phases of the project (i.e., preliminary, detailed, construction support, commissioning, available for service (“AFS”) and close out). OPG received four proposals in response to the RFP. OPG considered these proposals, but ultimately decided to cancel the RFP as it was not satisfied with any of the technical proposals.

- Please identify the six proponents and the four who provided proposals to OPG.
- Please provide the Scope of Work (SOW) document.
- Please provide the criteria used to evaluate the proposals.
- Please indicate why OPG was not satisfied with the technical proposals.

AMPCO Interrogatory #101

Reference: Exhibit L D2-02-AMPCO-101

Over the remainder of 2011, OPG refined the documentation for the project and created the technical specifications for a second engineering services RFP. The second engineering services RFP was issued in late 2011. The RFP featured a more developed scope of work (“SOW”), which provided greater detail on OPG’s expectations for the project and also included certain mandatory criteria that proponents had to meet in order for their proposal to be considered. OPG received three proposals, but its initial review of compliance with the mandatory criteria determined that none of the proposals complied. As a result, OPG suspended further evaluation of the proposals and cancelled the RFP.

- a) Please identify the proponents that received the RFP and the three who provided proposals to OPG.
- b) Please provide the more detailed SOW document.
- c) Please provide the mandatory criteria that proponents had to meet.
- d) Please identify the mandatory criteria that could not be met and why the three proponents did not meet the criteria.

OPG Response

OPG declines to provide the requested materials on the basis of relevance. The engineering services RFP referred to in the question was cancelled almost ten years ago. OPG ultimately determined to issue a work request for an EPC contractor under the ESMSA (see responses to Ex. L-D2-02-AMPCO-102 through Ex. L-D2-02-AMPCO-106). The requested material neither forms part of the costs that OPG seeks to recover in this application nor provides any relevant information about the project.

AMPCO Response

The final cost of the D2O Storage Project is \$400M more than its original estimate of \$108 M, and the final in-service date of 2020 is five years beyond the initial 2015 in-service date.⁴ OPG seeks to incorporate the remaining \$494.7M of capital cost for the D2O Storage Project in rate base. OPG cancelled two Request for Proposal (RFP) processes in 2011 before retaining Black & McDonald (B&M) in 2012 as prime-contractor through a less rigorous work request process under a newly established Extended Services Master Service Agreement (ESMSA) that OPG put in place in 2012.⁵ Due to poor performance, OPG terminated B&M in 2014. OPG's development of contracting options for this first of a kind and complex D2O Storage Project is relevant to the determination of prudence in contractor selection and the project overall, given the significant cost and schedule overruns and eventual contractor termination. Further discovery of who the proponents were, the scope of work and the mandatory criteria that proponents had to meet in the two RFPs, and why they did not, compared to the criteria applied under the ESMSA work request process is reasonable and relevant especially considering the Auditor General found that the contractor selected to perform the D2O Storage Project work was based on their low bid prices even though the competing contractor scored higher on technical criteria.⁶ This technical criteria relates to the engineering component of the project work which was the subject of the two cancelled RFPs. The fact that the two RFPs for engineering services took

⁴ Exhibit D2-2-10 Attachment 2m (Prior to finalizing the agreement with B&M, OPG approved the Full Release Definition BCS)

⁵ Feb 12, 2012 EB-2016-0152 D2-T2-S3 Att5 Page 1 of 11

⁶ Exhibit L D2-02-SEC-086 – 2018 ANNUAL REPORT OF THE OFFICE OF THE AUDITOR GENERAL OF ONTARIO, Section 3.02 Darlington Nuclear Generating Station Refurbishment Project Appendix 5 P164
SECTION 3.02, 2018 ANNUAL REPORT OF THE OFFICE OF THE AUDITOR GENERAL OF ONTARIO

place ten years ago is irrelevant given that the RFP process was within the lifetime of the project which commenced in 2006 and was completed in 2020.

3. AMPCO Interrogatory #159 part (c)

Reference: Exhibit L F2-08-AMPCO-159 (c)

This interrogatory is included on this list since the matter of inclusion of SMRs on the Issues List has yet to be decided.

AMPCO Interrogatory #159 (c)

Reference: Ex F2 T8 S1

C) Is it OPG's opinion that all costs (capital and OM&A) associated with engineering, designing, building, and commissioning an SMR Reactor should be covered by the ratepayer through its OEB Applications (this one and/or subsequent ones)? If so, why should the ratepayer be the sole source of funding for a currently unproven technology? If not, what costs does OPG think should be covered by the ratepayer? Where should additional funding come from?

OPG Response

OPG declines to respond to these questions on the basis of relevance. These questions do not seek information that is relevant to any issue before the OEB in the current application. As explained in the following paragraph, OPG is not seeking recovery of any funding for SMR development in this application.

As indicated in Ex. F2-8-1, OPG is in the initial planning and preparation phase for SMR development at Darlington, and neither an SMR proposal nor a business case has been developed. OPG intends to develop a proposal by late 2021 upon which an investment decision can be made. As there are no forecasted planning and preparation expenditures for the development of an SMR at Darlington included in OPG's current payment amounts, OPG will record such costs incurred in 2020 and 2021 in the NDVA in accordance with O. Reg. 53/05. OPG will seek recovery of eligible amounts in the NDVA through a future proceeding.

AMPCO Response

AMPCO respectfully requests that the Board direct OPG to respond to AMPCO IR #159(c) for the following reasons.

- In its evidence at F2-T8-S1, OPG has indicated that it will be posting \$272M to the Nuclear Development Variance Account but does not intend to seek clearance of that amount during this proceeding. AMPCO believes that the Board should review not only

the clearance of the account, but OPG's ability to unilaterally post this amount to the account.

- SMR technology is at the research and development stage. AMPCO questions whether it is reasonable to expect ratepayers to fund R&D activities prior to the technology being commercially viable.
- SMRs will serve political policy objectives that are well beyond the electricity sector such as net-zero carbon mandates, climate change objectives and Governmental economic development objectives. Perhaps all SMR cost responsibilities should not rest with the ratepayer.
- Many material OPG expenses are not included in EB-2020-0290, such as costs included within the Pickering Closure Costs deferral account, costs included within the COVID-19 deferral account, and costs included within the Fitness for Duty Deferral Account, the Rate Smoothing Deferral Account, a portion of the Nuclear Development Variance Account, and certain components of the Capacity Refurbishment Variance Account. The potential for material SMR costs being incurred to be cleared at a later date increases the amount of this cost exclusion.
- The general approach of not seeking recovery of all material costs tends to reduce the overall revenue requirement being sought in this Application, and pushes costs down the road to be dealt with at a later time. These amounts will, of course, be sought at some point. This fragmented approach understates the true consumer impact of OPG's current Application. AMPCO assumes that the Board shares this concern in respect of continued fragmentation of the true impact of OPG's current Application, and should also be further concerned about the quantum of SMR capital and non-capital costs that could potentially be incurred during the test period. Further, it is possible that OPG will, at some point, apply for recovery of significant amounts of capital and non-capital costs that have already been incurred – incurred, with no ability for the Board to have given OPG any direction regarding the appropriateness or the prudence of that spend. AMPCO expects that the Board would prefer to have those discussions before the money is spent, not after.

4. Technical Conference Undertaking Refusal #1

Reference: Transcript Volume 2 May 6, 2021 Pages 58-60

AMPCO requested that OPG update the Comparison of Capital Expenditures - Nuclear Operations (\$M), Table 4A and Table 4B, at Exhibit D2 Tab 1 Schedule 2, to reflect OPG's approved Business Plan amounts instead of the OEB-approved amounts for the years 2017 to 2021.

OPG's position is to "object to that question on the basis of relevance since it's related to past periods; it's related to the fact that what the OEB approves is our in-service amount, not our capital expenditures amount; and are measures with respect to project performances in respect of the in-service amount, not capital expenditure; and that business the plans themselves as past business plans are not relevant." (Transcript Volume 2 P60)

AMPCO Response

Table 4A shows that OPG significantly overspent on its Nuclear Portfolio Projects Capital Budget compared to OEB approved by \$80.6M, \$119.4M, \$97.4M, \$102.0M in 2017, 2018, 2019, 2020, respectively, and forecasts to overspend by \$200.6M in 2021. Although the OEB specifically approved in-service capital addition amounts for the years 2017-2021 in its EB-2016-0152 Decision⁷, the OEB also provided a Nuclear Operations Capital Expenditures Table and made comments regarding the level of capital spend and the pattern of in-service additions as a percentage of capital expenditures. There is a direct relationship between the level of capital expenditures and future in-service additions. Overspending on annual capital budgets over time leads to a corresponding increase in in-service additions exceeding OEB approved amounts. OPG indicates its specific capital expenditures and targets are effected in OPG's annual business plans developed over the 2018 to 2022 period⁸, meaning OPG did not manage its capital spend to OEB-Approved amounts over the 2017 to 2021 period. Rather, OPG managed to updated OPG Board approved Business Plan expenditure amounts set annually. AMPCO seeks updated Tables 4A and 4B to show the comparison of capital expenditures over the 2017 to 2021 period to OPG's annual Business Plan budget limits. Information on the annual capital amounts that OPG managed its portfolio of projects to for past periods is relevant in this proceeding as OPG is seeking to place the in-service amounts that result from these past period capital expenditures in opening rate base in 2022. In addition, the information is needed to determine if OPG has been effectively managing a portfolio of projects to approved annual expenditure limits and if these annual OPG budgets were reasonable when compared to industry benchmarks.

5. Technical Conference Undertaking Refusal #2

Reference: Transcript Volume 2 May 6, 2021 Pages 60-61

AMPCO requested that OPG update the Comparison of In-Service Capital Additions - Nuclear Operations (\$M), Table 4A and Table 4B, at Exhibit D2 Tab 1 Schedule 3, to reflect OPG's approved Business Plan amounts instead of the OEB-approved amounts for the years 2017 to 2021.

OPG objected to provide the information on the same basis as Issue #4 above.
(Transcript Volume 2 P61)

AMPCO Response

In EB-2016-0152, OPG identified annual planned capital expenditures and forecast in-service amounts. OPG is forecasting to place over \$300 million project portfolio capital in-service above EB-2016-0152 OEB approved amounts.⁹ OPG has indicated the project portfolio annual

⁷ EB-2016-0152 Decision P14-15

⁸ Transcript Volume 1 May 3, 2021 Page 163

⁹ Exhibit D2 Tab 1 Schedule 3 Tables 4A & 4B

expenditures are not managed to the budgets established in EB-2016-0152 but rather each year annual capital expenditure limits are established during annual OPG Business Plan approvals. Given annual capital expenditures directly translate to future capital in-service additions, AMPCO has requested OPG to update the Comparison of In-Service Capital Additions – Nuclear Operations (4M), at Exhibit Table 4A and 4B, at Exhibit D2 Tab 1 Schedule 3, to reflect OPG’s approved annual Business Plan amounts. This information is reasonable and relevant as it allows a review of annual business planning capital in-service targets in the context of effective project portfolio management, project prioritization, OEB approved amounts, and value for money.

6. Technical Conference Undertaking Refusals #3 & #4

Reference: Transcript Volume 4 May 6, 2021 Pages 51-52

AMPCO requested that OPG update the Comparison of Capital Expenditures - Support Services (\$M) at Exhibit D3, tab 1, Schedule 1, Table 2A and 2B to replace the OEB-approved plan amounts for the internal OPG business plan amounts.

AMPCO requested that OPG update the Comparison of In-Service Capital Additions - Support Services (\$M) at Exhibit D3, Tab 1, Schedule 2, Table 5A and Table 5B to replace the OEB-approved plan amounts for the internal OPG business plan amounts.

OPG Response

Refusal.

AMPCO Response

Information on the annual capital and in-service amounts that OPG managed to for Support Services is relevant in this proceeding as OPG is seeking to place the in-service amounts that result from these past period capital expenditures in opening rate base in 2022. The information request is reasonable and needed to determine if OPG has effectively managed to approved annual expenditure limits.

Numbers may not add due to rounding.

Filed: 2020-12-31
EB-2020-0290
Exhibit D2
Tab 1
Schedule 2
Table 4a

Table 4a
Comparison of Capital Expenditures - Nuclear Operations (\$M)

Line No.	Business Unit	2016 Budget	(c)-(a) Change	2016 Actual	(g)-(c) Change	2017 OEB Approved ¹	(g)-(e) Change	2017 Actual	(k)-(g) Change	2018 OEB Approved ¹	(k)-(i) Change	2018 Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Portfolio Projects (Allocated)											
1	Darlington NGS	203.8	(33.0)	170.8	51.9	166.2	56.4	222.6	49.4	127.0	145.1	272.0
2	Pickering NGS	88.7	(7.5)	81.2	1.5	21.6	61.2	82.7	(36.7)	2.0	44.0	46.1
3	Operations and Project Support	18.6	2.1	20.6	7.6	16.3	11.9	28.2	11.1	14.4	24.9	39.3
4	Subtotal Portfolio Projects (Allocated)	311.0	(38.4)	272.6	60.9	204.1	129.5	333.5	23.8	143.4	214.0	357.4
5	Portfolio Projects (Unallocated)	4.8	(4.8)	0.0	0.0	48.8	(48.8)	0.0	0.0	94.6	(94.6)	0.0
6	Subtotal Project Capital (Portfolio)	315.8	(43.2)	272.6	60.9	252.9	80.6	333.5	23.8	238.0	119.4	357.4
7	Darlington New Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Darlington Water Treatment Plant Lease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	Darlington Spacer Retrieval ^{2,3}	6.2	(1.4)	4.8	(3.8)	0.2	0.8	1.0	(1.0)	0.0	0.0	0.0
10	Pickering Extended Operations ³	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8	2.8
11	Minor Fixed Assets	31.0	(7.9)	23.1	(3.3)	26.0	(6.2)	19.8	2.0	20.0	1.7	21.7
12	Total Nuclear Operations Capital	353.0	(52.5)	300.5	53.9	279.1	75.2	354.3	27.6	258.0	123.9	381.9

Line No.	Business Unit	2018 Actual	(e)-(a) Change	2019 OEB Approved ¹	(e)-(c) Change	2019 Actual	(i)-(e) Change	2020 OEB Approved ¹	(i)-(g) Change	2020 Budget	(k)-(i) Change	2021 Budget
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Portfolio Projects (Allocated)											
13	Darlington NGS	272.0	5.5	88.6	188.9	277.6	28.4	37.4	268.6	305.9	50.8	356.7
14	Pickering NGS	46.1	(7.4)	0.0	38.6	38.6	(11.6)	0.0	27.0	27.0	(17.7)	9.3
15	Operations and Project Support	39.3	(10.1)	0.0	29.2	29.2	17.4	0.0	46.6	46.6	15.3	61.9
16	Subtotal Portfolio Projects (Allocated)	357.4	(12.0)	88.6	256.8	345.4	34.1	37.4	342.1	379.5	48.4	427.9
17	Portfolio Projects (Unallocated)	0.0	0.0	159.4	(159.4)	0.0	(18.5)	221.6	(240.1)	(18.5)	(28.8)	(47.4)
18	Subtotal Project Capital (Portfolio)	357.4	(12.0)	248.0	97.4	345.4	15.6	259.0	102.0	361.0	19.6	380.6
19	Darlington New Fuel	0.0	16.8	15.3	1.5	16.8	(16.8)	0.0	0.0	0.0	0.0	0.0
20	Darlington Water Treatment Plant Lease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Darlington Spacer Retrieval ^{2,3}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Pickering Extended Operations ³	2.8	6.2	0.0	9.0	9.0	9.0	0.0	18.0	18.0	(15.1)	2.9
23	Minor Fixed Assets	21.7	2.4	19.1	5.0	24.1	(2.1)	19.5	2.6	22.0	2.0	24.1
24	Total Nuclear Operations Capital	381.9	13.4	282.4	112.9	395.3	5.7	278.5	122.6	401.0	6.5	407.5

Notes

1

Amounts per EB-2016-0152, Ex. D2-1-2 Table 4 with exception of 2017 and 2018 Projects Portfolio (Allocated) that have been adjusted for reclassification of projects from Darlington to Operations and Project Support.

2 Project #82949 DN X-750 Spacer Retrieval CMFA.

3 OEB Approved amounts for Darlington Spacer Retrieval and Pickering Extended Operations per EB-2016-0152, Ex. L-04.1 Staff -024

Numbers may not add due to rounding.

Filed: 2020-12-31
EB-2020-0290
Exhibit D2
Tab 1
Schedule 2
Table 4b

Table 4b
Comparison of Capital Expenditures - Nuclear Operations (\$M)

Line No.	Business Unit	2021 OEB Approved ¹	(c)-(a) Change	2021 Budget	(e)-(c) Change	2022 Plan	(g)-(e) Change	2023 Plan	(i)-(g) Change	2024 Plan	(k)-(i) Change	2025 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Portfolio Projects (Allocated)											
25	Darlington NGS	30.2	326.5	356.7	4.4	361.1	(69.4)	291.8	(30.4)	261.3	(46.9)	214.4
26	Pickering NGS	0.0	9.3	9.3	(8.9)	0.4	(0.4)	0.0	0.0	0.0	0.0	0.0
27	Operations and Project Support	0.0	61.9	61.9	(43.0)	18.8	(14.3)	4.6	(2.8)	1.8	1.3	3.1
28	Subtotal Portfolio Projects (Allocated)	30.2	397.7	427.9	(47.6)	380.4	(84.0)	296.3	(33.2)	263.2	(45.6)	217.5
29	Portfolio Projects (Unallocated)	149.8	(197.1)	(47.4)	60.4	13.0	35.5	48.5	(14.9)	33.6	33.1	66.7
30	Subtotal Project Capital (Portfolio)	180.0	200.6	380.6	12.8	393.3	(48.5)	344.8	(48.1)	296.7	(12.5)	284.2
31	Darlington New Fuel	0.0	0.0	0.0	0.0	0.0	16.5	16.5	0.4	16.9	(16.9)	0.0
32	Darlington Water Treatment Plant Lease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	138.6	138.6	(138.6)	0.0
33	Darlington Spacer Retrieval ^{2,3}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	Pickering Extended Operations ³	0.0	2.9	2.9	(2.9)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Minor Fixed Assets	19.3	4.7	24.1	(4.4)	19.6	1.4	21.0	8.2	29.2	(10.6)	18.7
36	Total Nuclear Operations Capital	199.3	208.2	407.5	5.4	413.0	(30.6)	382.3	99.1	481.4	(178.5)	302.9

Line No.	Business Unit	2025 Plan	(c)-(a) Change	2026 Plan
		(a)	(b)	(c)
	Portfolio Projects (Allocated)			
37	Darlington NGS	214.4	(79.5)	134.9
38	Pickering NGS	0.0	0.0	0.0
39	Operations and Project Support	3.1	(3.1)	0.0
40	Subtotal Portfolio Projects (Allocated)	217.5	(82.6)	134.9
41	Portfolio Projects (Unallocated)	66.7	(9.9)	56.9
42	Subtotal Project Capital (Portfolio)	284.2	(92.5)	191.8
43	Darlington New Fuel	0.0	18.1	18.1
44	Darlington Water Treatment Plant Lease	0.0	0.0	0.0
45	Darlington Spacer Retrieval ²	0.0	0.0	0.0
46	Pickering Extended Operations	0.0	0.0	0.0
47	Minor Fixed Assets	18.7	(7.3)	11.4
48	Total Nuclear Operations Capital	302.9	(81.7)	221.2

Notes

1

Amounts per EB-2016-0152, Ex. D2-1-2 Table 4 with exception of 2017 and 2018 Projects Portfolio (Allocated) that have been adjusted for reclassification of projects from Darlington to Operations and Project Support.

2 Project #82949 DN X-750 Spacer Retrieval CMFA.

3 OEB Approved amounts for Darlington Spacer Retrieval and Pickering Extended Operations per EB-2016-0152, Ex. L-04.1 Staff -024

Numbers may not add due to rounding.

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EB-2020-0290
Exhibit D2
Tab 1
Schedule 3
Table 4a

Table 4a
Comparison of In-Service Capital Additions - Nuclear Operations (\$M)

Line No.	Business Unit	2016 Budget	(c)-(a) Change	2016 Actual	(g)-(c) Change	2017 OEB Approved ¹	(g)-(e) Change	2017 Actual	(k)-(g) Change	2018 OEB Approved ¹	(k)-(i) Change	2018 Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Darlington NGS	325.9	(105.6)	220.3	(16.3)	226.1	(22.1)	204.1	81.8	216.4	69.5	285.8
2	Pickering NGS	146.0	(98.0)	47.9	132.4	172.8	7.5	180.3	(113.9)	47.5	18.9	66.4
3	Operations and Project Support ²	36.0	(34.2)	1.8	40.8	49.2	(6.6)	42.6	(26.2)	45.9	(29.5)	16.4
4	Subtotal	507.9	(237.8)	270.1	156.9	448.2	(21.2)	427.0	(58.4)	309.8	58.8	368.6
5	Supplemental In-Service Forecast ³	(41.8)	41.8	0.0	0.0	(1.6)	1.6	0.0	0.0	24.9	(24.9)	0.0
6	Total Portfolio In-Service Forecast	466.0	(195.9)	270.1	156.9	446.6	(19.6)	427.0	(58.4)	334.7	33.9	368.6
7	Darlington New Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Darlington Water Treatment Plant Lease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	Darlington Spacer Retrieval ⁴	0.0	0.0	0.0	5.8	6.4	(0.6)	5.8	(5.8)	0.0	0.0	0.0
10	Pickering Extended Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Minor Fixed Assets	31.0	(14.7)	16.3	15.4	26.0	5.6	31.6	(9.9)	20.0	1.7	21.7
12	In-Service Capital Additions before Disallowance	497.0	(210.7)	286.4	178.0	479.0	(14.6)	464.4	(74.1)	354.7	35.6	390.3
13	OEB Disallowance					(47.9)				(35.5)		
14	Total In-Service Capital Additions	497.0	(210.7)	286.4	178.0	431.1	33.3	464.4	(74.1)	319.2	71.1	390.3

Line No.	Business Unit	2018 Actual	(e)-(a) Change	2019 OEB Approved ¹	(e)-(c) Change	2019 Actual	(i)-(e) Change	2020 OEB Approved ¹	(i)-(g) Change	2020 Budget	(k)-(g) Change	2021 Budget
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
15	Darlington NGS	285.8	(25.3)	295.7	(35.2)	260.5	(84.4)	101.3	74.9	176.1	63.4	239.5
16	Pickering NGS	66.4	(29.6)	9.7	27.0	36.8	(1.8)	29.7	5.2	34.9	(14.1)	20.9
17	Operations and Project Support ²	16.4	(11.9)	44.3	(39.8)	4.5	16.6	0.0	21.1	21.1	44.3	65.4
18	Subtotal	368.6	(66.8)	349.8	(48.0)	301.8	(69.6)	131.0	101.1	232.1	93.6	325.8
19	Supplemental In-Service Forecast ³	0.0	0.0	16.6	(16.6)	0.0	(20.4)	78.8	(99.2)	(20.4)	(2.7)	(23.1)
20	Total Portfolio In-Service Forecast	368.6	(66.8)	366.3	(64.5)	301.8	(90.0)	209.8	1.9	211.7	90.9	302.7
21	Darlington New Fuel	0.0	0.0	0.0	0.0	0.0	17.1	15.3	1.7	17.1	(17.1)	0.0
22	Darlington Water Treatment Plant Lease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Darlington Spacer Retrieval ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	Pickering Extended Operations	0.0	0.8	0.0	0.8	0.8	30.7	0.0	31.5	31.5	(26.4)	5.1
25	Minor Fixed Assets	21.7	1.8	19.1	4.5	23.5	(1.7)	19.5	2.4	21.9	2.2	24.1
26	Total In-Service Capital Additions	390.3	(64.2)	385.4	(59.3)	326.1	(43.9)	244.7	37.6	282.2	49.6	331.8
27	OEB Disallowance			(38.5)				(24.5)				
28	Total In-Service Capital Additions	390.3	(64.2)	346.9	(20.8)	326.107	(43.9)	220.2	62.0	282.2	49.6	331.8

Notes:

- 1 In-service additions per EB-2016-0152, Ex. J21.1, Attachment 2, Table 2. Amounts in this schedule do not reflect OEB-ordered reductions for: Auxiliary Heating System in-service amount (EB-2016-0152 Decision and Order, p. 21); Operations Support Building in-service amount (EB-2016-0152 Decision and Order, p. 22). These reductions are reflected in total nuclear rate base amounts in Ex. B3-2-1, Table 1. The 2017-2020 sub-components within the total portfolio in service forecast has also been adjusted for reclassification of projects from Darlington to Operations and Projects Support with no change to total amount.
- 2 Includes Engineering, Inspection and Reactor Innovation, and Security & Emergency Services.
- 3 Supplemental forecast to reconcile BCS in-service estimates to final business plan (see Ex. D2-1-3, Section 4.0).
- 4 Project #82949 DN X-750 Spacer Retrieval CMFA. OEB Approved amounts for Darlington Spacer Retrieval per EB-2016-0152, Schedule 1, Staff-024, which were reflected in EB-2016-0152 Ex. J21.1, Attachment 2, Table 1.

Numbers may not add due to rounding.

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EB-2020-0290
Exhibit D2
Tab 1
Schedule 3
Table 4b

Table 4b
Comparison of In-Service Capital Additions - Nuclear Operations (\$M)

Line No.	Business Unit	2021 OEB Approved ¹	(c)-(a) Change	2021 Budget	(e)-(c) Change	2022 Plan	(e)-(c) Change	2023 Plan	(g)-(e) Change	2024 Plan	(i)-(g) Change	2025 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Darlington NGS	62.1	177.5	239.5	170.2	409.7	(92.2)	317.6	(26.0)	291.6	82.7	374.3
2	Pickering NGS	0.0	20.9	20.9	(20.9)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Operations and Project Support ²	0.0	65.4	65.4	(52.0)	13.4	80.4	93.8	(93.8)	0.0	29.5	29.5
4	Subtotal	62.1	263.7	325.8	97.4	423.1	(11.8)	411.3	(119.7)	291.6	112.3	403.9
5	Supplemental In-Service Forecast ³	100.2	(123.4)	(23.1)	14.6	(8.5)	37.7	29.2	(16.1)	13.1	24.8	37.9
6	Total Portfolio In-Service Forecast	162.3	140.4	302.7	112.0	414.7	25.9	440.5	(135.8)	304.7	137.1	441.8
7	Darlington New Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	16.5	0.4	16.9
8	Darlington Water Treatment Plant Lease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	138.6	138.6	(138.6)	0.0
9	Darlington Spacer Retrieval ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Pickering Extended Operations	0.0	5.1	5.1	(5.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Minor Fixed Assets	19.3	4.7	24.1	(4.4)	19.6	1.4	21.0	8.2	29.2	(10.6)	18.7
12	Total In-Service Capital Additions	181.6	150.2	331.8	102.5	434.3	27.3	461.6	27.4	489.0	(11.7)	477.3
13	OEB Disallowance	(18.2)										
14	Total In-Service Capital Additions	163.5	168.3	331.8	102.5	434.3	27.3	461.6	27.4	489.0	(11.7)	477.3

Line No.	Business Unit	2025 Plan	(c)-(a) Change	2026 Plan
		(a)	(b)	(c)
15	Darlington NGS	374.3	(205.4)	168.9
16	Pickering NGS	0.0	0.0	0.0
17	Operations and Project Support ²	29.5	(29.5)	0.0
18	Subtotal	403.9	(234.9)	168.9
19	Supplemental In-Service Forecast ³	37.9	112.0	149.9
20	Total Portfolio In-Service Forecast	441.8	(123.0)	318.8
21	Darlington New Fuel	16.9	1.2	18.1
22	Darlington Water Treatment Plant Lease	0.0	0.0	0.0
23	Darlington Spacer Retrieval ⁴	0.0	0.0	0.0
24	Pickering Extended Operations	0.0	0.0	0.0
25	Minor Fixed Assets	18.7	(7.3)	11.4
26	Total In-Service Capital Additions	477.3	(129.0)	348.3

Notes:

- In-service additions per EB-2016-0152, Ex. J21.1, Attachment 2, Table 2. Amounts in this schedule do not reflect OEB-ordered reductions for: Auxiliary Heating System in-service amount (EB-2016-0152 Decision and Order, p. 21); Operations Support Building in-service amount (EB-2016-0152 Decision and Order, p. 22). These reductions are reflected in total nuclear rate base amounts in Ex. B3-2-1, Table 1. The 2017-2020 sub-components within the total portfolio in service forecast has also been adjusted for reclassification of projects from Darlington to Operations and Projects Support with no change to total amount.
- Includes Engineering, Inspection and Reactor Innovation, and Security & Emergency Services.
- Supplemental forecast to reconcile BCS in-service estimates to final business plan (see Ex. D2-1-3, Section 4.0).
- Project #82949 DN X-750 Spacer Retrieval CMFA. OEB Approved amounts for Darlington Spacer Retrieval per EB-2016-0152, Schedule 1, Staff-024, which were reflected in EB-2016-0152 Ex. J21.1, Attachment 2, Table 1.

Numbers may not add due to rounding.

Updated: 2021-04-29
EB-2020-0290
Exhibit D3
Tab 1
Schedule 1
Table 2a

Table 2a
Comparison of Capital Expenditures - Support Services (\$M) 2016-2021
(Capital Expenditures Impacting Nuclear Rate Base or Asset Service Fee)

Line No.	Business Unit	2016 Budget ¹	(c)-(a) Change	2016 Actual	(g)-(c) Change	2017 OEB Approved ¹	(g)-(e) Change	2017 Actual	(k)-(g) Change	2018 OEB Approved ¹	(k)-(i) Change	2018 Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Capital Projects (Allocated)											
1	IT	20.6	15.3	36.0	19.0	11.9	43.1	55.0	7.7	18.5	44.2	62.7
2	Real Estate	12.3	2.1	14.4	0.0	7.7	6.7	14.4	11.5	8.0	17.9	25.9
3	Subtotal Capital Projects (Allocated)	32.9	17.4	50.3	19.0	19.6	49.8	69.3	19.2	26.5	62.1	88.6
4	IT (Unallocated)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Subtotal Capital Projects	32.9	17.4	50.3	19.0	19.6	49.8	69.3	19.2	26.5	62.1	88.6
6	Microsoft Enterprise Agreement	0.0	0.0	0.0	23.6	0.0	23.6	23.6	(23.6)	0.0	0.0	0.0
7	Clarington Corporate Campus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Total	32.9	17.4	50.3	42.6	19.6	73.4	92.9	(4.4)	26.5	62.1	88.6

Line No.	Business Unit	2018 Actual	(e)-(a) Change	2019 OEB Approved ¹	(e)-(c) Change	2019 Actual	(i)-(e) Change	2020 OEB Approved ¹	(i)-(g) Change	2020 Budget	(k)-(i) Change	2021 Budget
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Capital Projects (Allocated)											
9	IT	62.7	(9.6)	10.1	43.0	53.1	41.7	6.2	88.6	94.8	(26.6)	68.3
10	Real Estate	25.9	9.2	8.0	27.1	35.1	(19.7)	8.0	7.4	15.4	15.9	31.3
11	Subtotal Capital Projects (Allocated)	88.6	(0.3)	18.1	70.1	88.2	22.0	14.2	96.1	110.3	(10.7)	99.6
12	IT (Unallocated)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.6	38.6
13	Subtotal Capital Projects	88.6	(0.3)	18.1	70.1	88.2	22.0	14.2	96.1	110.3	27.9	138.2
14	Microsoft Enterprise Agreement	0.0	0.0	0.0	0.0	0.0	23.0	0.0	23.0	23.0	(23.0)	0.0
15	Clarington Corporate Campus	0.0	0.0	0.0	0.0	0.0		0.0				
16	Total	88.6	(0.3)	18.1	70.1	88.2		14.2				

1 IT values from EB-2016-0152 have been restated to remove Renewable Generation-related project amounts.

Numbers may not add due to rounding.

Updated: 2021-04-29
EB-2020-0290
Exhibit D3
Tab 1
Schedule 1
Table 2b

Table 2b
Comparison of Capital Expenditures - Support Services (\$M) 2021-2026
(Capital Expenditures Impacting Nuclear Rate Base or Asset Service Fee)

Line No.	Business Unit	2021 OEB Approved ¹	(c)-(a) Change	2021 Budget	(e)-(c) Change	2022 Plan	(g)-(e) Change	2023 Plan	(i)-(g) Change	2024 Plan	(k)-(i) Change	2025 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Capital Projects (Allocated)											
17	IT	7.4	60.9	68.3	10.7	79.0	(7.3)	71.7	(30.0)	41.7	24.3	66.0
18	Real Estate	8.0	23.3	31.3	(1.9)	29.5	(25.3)	4.2	8.1	12.3	(0.7)	11.6
19	Subtotal Capital Projects (Allocated)	15.4	84.2	99.6	8.9	108.5	(32.6)	75.9	(21.9)	54.0	23.6	77.6
20	IT (Unallocated)	0.0	38.6	38.6	(26.4)	12.2	(5.4)	6.8	32.7	39.5	(22.3)	17.2
21	Subtotal Capital Projects	15.4	122.8	138.2	(17.5)	120.7	(38.0)	82.7	10.8	93.5	1.3	94.8
22	Microsoft Enterprise Agreement	0.0	0.0	0.0	0.0	0.0	23.0	23.0	(23.0)	0.0	0.0	0.0
23	Clarington Corporate Campus	0.0										
24	Total	15.4										

Line No.	Business Unit	2025 Plan	(c)-(a) Change	2026 Plan
		(a)	(b)	(c)
	Capital Projects (Allocated)			
25	IT	66.0	(51.5)	14.5
26	Real Estate	11.6	(3.2)	8.4
27	Subtotal Capital Projects (Allocated)	77.6	(54.7)	22.9
28	IT (Unallocated)	17.2	51.5	68.7
29	Subtotal Capital Projects	94.8	(3.2)	91.6
30	Microsoft Enterprise Agreement	0.0	23.0	23.0
31	Clarington Corporate Campus			
32	Total			

1 IT values from EB-2016-0152 have been restated to remove Renewable Generation-related project amounts.

Numbers may not add due to rounding.

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Exhibit D3
Tab 1
Schedule 2
Table 5a

Table 5a
Comparison of In-Service Capital Additions - Support Services (\$M) 2016-2021

Line No.	Business Unit	2016 Budget	(c)-(a) Change	2016 Actual	(g)-(c) Change	2017 OEB Approved ¹	(g)-(e) Change	2017 Actual	(k)-(g) Change	2018 OEB Approved ¹	(k)-(i) Change	2018 Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	IT - Nuclear Rate Base	3.3	0.0	3.3	4.7	5.8	2.2	8.0	10.3	12.7	5.6	18.3
2	IT - Asset Service Fee	41.0	(12.9)	28.1	(5.0)	7.1	16.0	23.1	13.2	11.7	24.6	36.3
3	Real Estate - Nuclear Rate Base	5.6	0.0	5.6	(5.7)	24.0	(24.0)	0.0	15.0	4.7	10.3	15.0
4	Real Estate - Asset Service Fee	7.2	(0.6)	6.6	(1.0)	2.0	3.6	5.6	(0.7)	3.0	1.9	4.9
5	Clarington Corporate Campus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Microsoft Enterprise Agreement	0.0	0.0	0.0	23.6	0.0	23.6	23.6	(23.6)	0.0	0.0	0.0
7	Minor Fixed Assets	1.2	1.2	2.4	(2.3)	1.2	(1.1)	0.1	1.0	1.2	(0.1)	1.1
8	Total Support Services	58.3	(12.3)	46.0	14.3	40.1	20.3	60.4	15.2	33.3	42.3	75.6

Line No.	Business Unit	2018 Actual	(e)-(a) Change	2019 OEB Approved ¹	(e)-(c) Change	2019 Actual	(i)-(e) Change	2020 OEB Approved ¹	(i)-(g) Change	2020 Budget	(k)-(i) Change	2021 Budget
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
9	IT - Nuclear Rate Base	18.3	(1.9)	0.0	16.3	16.3	12.8	3.7	25.5	29.2	7.3	36.4
10	IT - Asset Service Fee	36.3	0.3	17.0	19.7	36.7	17.8	17.0	37.4	54.4	1.9	56.3
11	Real Estate - Nuclear Rate Base	15.0	10.8	7.7	18.0	25.7	(11.1)	1.0	13.6	14.6	7.7	22.3
12	Real Estate - Asset Service Fee	4.9	20.1	3.0	22.0	25.0	(19.8)	3.0	2.2	5.2	(3.9)	1.3
13	Clarington Corporate Campus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Microsoft Enterprise Agreement	0.0	0.0	0.0	0.0	0.0	22.9	0.0	22.9	22.9	(22.9)	0.0
15	Minor Fixed Assets	1.1	1.7	1.2	1.6	2.8	2.9	1.2	4.5	5.7	(2.3)	3.5
16	Total Support Services	75.6	30.9	28.9	77.6	106.5	25.5	25.9	106.1	132.0	(12.2)	119.8

Notes:

1 Per EB-2016-0152, D3-1-2 Table 5 except for IT and Real Estate rate base values which are allocations of Support Services values shown on EB-2016-0152 J21.1 Att 2, Table 1

Numbers may not add due to rounding.

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EB-2020-0290
Exhibit D3
Tab 1
Schedule 2
Table 5b

Table 5b
Comparison of In-Service Capital Additions - Support Services (\$M) 2021-2026

Line No.	Business Unit	2021 OEB Approved ¹	(c)-(a) Change	2021 Budget	(e)-(c) Change	2022 Plan	(g)-(e) Change	2023 Plan	(i)-(g) Change	2024 Plan	(k)-(i) Change	2025 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
17	IT - Rate Base	2.2	34.2	36.4	0.5	36.9	(2.1)	34.8	(2.9)	31.9	(4.0)	27.9
18	IT - Asset Service Fee	17.0	39.3	56.3	(17.2)	39.1	2.5	41.6	(1.7)	39.9	6.0	45.9
19	Real Estate - Rate Base	1.0	21.3	22.3	9.0	31.3	(28.2)	3.2	(0.7)	2.5	17.4	19.9
20	Real Estate - Asset Service Fee	3.0	(1.7)	1.3	(0.3)	1.0	0.0	1.0	0.0	1.0	0.0	1.0
21	Clarington Corporate Campus	0.0	0.0	0.0	0.0	0.0	0.0					
22	Microsoft Enterprise Agreement	0.0	0.0	0.0	0.0	0.0	23.0	23.0	(23.0)	0.0	0.0	0.0
23	Minor Fixed Assets	1.2	2.3	3.5	(0.3)	3.2	0.0	3.2	0.0	3.2	0.0	3.2
24	Total Support Services	24.4	95.4	119.8	(8.2)	111.6	(4.8)					

Line No.	Business Unit	2025 Plan	(c)-(a) Change	2026 Plan
		(a)	(b)	(c)
25	IT - Rate Base	27.9	(1.0)	26.9
26	IT - Asset Service Fee	45.9	1.0	46.9
27	Real Estate - Rate Base	19.9	(15.9)	4.0
28	Real Estate - Asset Service Fee	1.0	(1.0)	0.0
29	Clarington Corporate Campus			
30	Microsoft Enterprise Agreement	0.0	23.0	23.0
31	Minor Fixed Assets	3.2	0.0	3.2
32	Total Support Services			

Notes:

¹ Per EB-2016-0152, D3-1-2 Table 5 except for IT and Real Estate rate base values which are allocations of Support Services values shown on EB-2016-0152 J21.1 Att 2, Table 1