Board Staff Interrogatory #6

- 2 3 Issue Number: 2.1
 - **Issue:** Are the amounts proposed for nuclear rate base (excluding those for the Darlington Refurbishment Program) appropriate?
- 5 Refurbishment Program) appropriate?
- 6 7

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- Interrogatory
- 8 9

10 **Reference:**

- 11 <u>Ref: Exh B1-1-1 Chart 1</u> 12
- a) Please update the 2016 budget for the most recent available actuals. (Please update
 DRP costs in this Chart, as well).
- 15
 b) Chart 1 shows 2016 forecast of support services capital projects entering rate base of \$10.5M and Exh D3-1-2 Table 5, lines 7 and 9 shows \$8.5M+\$5.1M=\$14M. Similarly, for 2018 Chart 1 shows \$18.0M and Table 5 shows \$18.8. Please explain the difference and/or update the evidence.
- 20 21

22 <u>Response</u>23

24 a) The updated 2016 forecast is included in Chart 1 below.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 1 Staff-006 Page 2 of 2

Chart 1

1 2

Forecast Nuclear In-service Capital Additions* (\$M)

3 *Amounts may not add due to rounding.

	Reference	Updated 2016	2017	2018	2019	2020	2021
Nuclear operations capital projects	Ex. D2-1-3 Table 4, line 17 & 26	451.8	389.0	315.2	239.3	300.4	215.6
Darlington Refurbishment Program	Ex. D2-2-10 Table 5, line 12 & 17	386.6	374.4	8.9	0.0	4809.2	0.4
Support Services capital projects entering rate base	Nuclear Portion of Ex. D3-1-2 Table 5, lines 7,9,13 & 15	13.8	8.1	18.0	5.0	5.0	5.0
Total nuclear in- service additions, excluding ARC	Ex. B3-3-1 Table 1 & 2, col. (b)	852.2	771.5	342.1	244.3	5,114.7	221.1

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b) As noted in Ex. B1-1-1 Chart 1 "Reference" column, Support Services in-service capital 7 additions shown in the chart reflect amounts related to the nuclear facilities. Ex. D3-1-2 8 Table 5 lines 1, 3, 7, 9, 13 and 15 present the total Support Services' capital project in-9 service additions entering rate base for both the nuclear and regulated hydroelectric operations. As such, the difference in the amounts shown in Ex. D3-1-2 Table 5 and Ex. 10 B1-1-1 Chart 1 relate to the regulated hydroelectric operations. 11

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 1 Staff-007 Page 1 of 2

Board Staff Interrogatory #7

- 3 **Issue Number: 2.1**
- Issue: Are the amounts proposed for nuclear rate base (excluding those for the 4
- 5 Darlington Refurbishment Program) appropriate?
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8 Interrogatory 9

10 **Reference:**

11 Ref: Exh B3-3-1 Table 1

- 12
- 13

14 Please see the following chart of Total Nuclear In-service Capital additions without ARC

15 or DRP for 2013-2015 with the sources of the information. The 2013-2015 Nuclear Operations totals do not agree with the totals in Exhibit B3-3-1 Table 1 when DRP is

16

excluded. Please explain or update the evidence. 17

18

(in millions)	2013 Actual	2014 Actual	2015 Actual	Source
				D2-1-3 Table 4, line
In-service Capital Additions	\$193.4	\$125.8	\$181.8	4
Minor Fixed Assets	\$10.2	\$22.9	\$22.3	D2-1-3 Table 4, line 7
				Exhibit D3-1-2 Table 5 lines
Support Services	\$3.7	\$1.8	\$2.9	1,3,7,9,13,15
TOTAL Nuclear Operations Capital	\$207.3	\$150.5	\$207.0	
TOTAL NUCLEAR CAPITAL ADDITIONS (excluding DRP and ARC)	\$214.5	\$228.1	\$216.5	Exhibit B3-3-1 Table 1, net change

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22 Response

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24 Several adjustments are necessary to the table provided in the question in order to compare 25 the amounts per Ex. D2 and Ex. B3. First, the correct total Nuclear Capital additions in line 26 with the pre-filed Ex. B3-3-1 Table 1 in-service additions (excluding DRP and ARC) are \$217.0M, \$141.6M, and \$214.1M for 2013, 2014 and 2015 respectively, not \$214.5M, 27 \$228.1M and \$216.5M, respectively. Second, there is an error in prefiled Ex. D2-1-3 Table 4 28 for the 2013 year. The correct value for Ex. D2-1-3 Table 4, line 4 should be \$202.4M as 29 30 previously provided in EB-2013-0321 Ex. L4.7-17 SEC-50 Attachment 1, Table 4, line 16. 31 Chart 1 below represents the corrected comparison of the amounts in the question.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 1 Staff-007 Page 2 of 2

Nu	mbers may not add due to rounding. Chart 1											
	Nuclear Capital In-Service Additions (\$M)											
Line No.		2013 Actual	2014 Actual	2015 Actual								
1	In Service Capital Additions	202.4	125.7	181.8								
2	Minor Fixed Assets	10.2	22.9	22.3								
3	Support Services (Nuclear portion only)	3.4	1.8	2.9								
4	Total Nuclear Operations Capital In-Service Additions	216.0	150.4	207.0								
5	TOTAL NUCLEAR CAPITAL ADDITIONS (excl. DRP & ARC)	217.0	141.6	214.1								

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For all years, the variances between lines 4 and 5 primarily relate to self-correcting interperiod timing differences. For example, as noted in EB-2013-0321 Ex. JT 1.24, footnote 1, certain minor fixed asset components purchased in earlier years were placed in service and included in rate base in 2013, while being reflected in Exhibit D2 evidence in the years purchased. The difference in 2014 mainly relates to a capital spare purchased and reflected in Exhibit D2 in 2014 but not included in rate base until 2015. The 2015 variance mainly represents the reversal of the 2014 difference.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 2 AMPCO-013 Page 1 of 1

AMPCO Interrogatory #13

3 **Issue Number: 2.1**

4 Issue: Are the amounts proposed for nuclear rate base (excluding those for the Darlington 5

- Refurbishment Program) appropriate?
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Interrogatory 9

10 Reference:

11 Ref: B1-1-1 Page 3 Chart 1

- 12 13 a) Please provide the budgeted, Board-Approved and actual in-service capital additions for 14 each category in Chart 1 for the years 2010 to 2015.
- 15

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17 Response

18

19 The requested information is provided in Attachment1. As there were no Board-approved 20 amounts for 2010 and 2013, none are shown. To assist with period-over-period comparability of information, the 2011 and 2012 planned amounts exclude the rate base treatment of 21 22 Darlington Refurbishment Construction Work in Progress (CWIP) proposed by OPG in EB-23 2010-0008 that was not accepted by the OEB. The planned "in service" amounts associated 24 with this proposed treatment were \$105.2M for 2011 and \$255.8M for 2012.

	20	2010		2011			2012		20	13	2014				2015	
	Budget	Actual	Plan	Board Approved	Actual	Plan	Board Approved	Actual	Budget	Actual	Plan	Board Approved	Actual	Plan	Board Approved	Actual
Nuclear Operations Capital Projects ¹	191.5	249.0	175.5	175.5	103.2	187.6	187.6	131.9	180.7	212.6	158.3	158.3	148.6	141.7	207.7	204.1
Darlington Refurbishment Program ²	-	-	-	-	-	-	-	5.0	104.2	99.2	18.7	18.7	43.5	209.4	143.4	147.1
Support Services Capital Projects (Nuclear portion) ³	8.8	4.7	8.0	8.0	12.0	18.3	18.3	15.2	8.0	3.4	2.4	2.4	1.8	7.0	7.0	2.9
Nuclear In-service Capital Additions Reported in Ex. D2	200.2	253.7	183.4	183.4	115.2	205.9	205.8	152.2	293.0	315.1	179.4	179.4	193.8	358.2	358.2	354.1
Reconciliting Items ⁴	-	22.8	-	-	4.5	-	-	1.3	-	1.0	-	-	(8.7)	-	-	7.1
Total Nuclear Capital In-service Additions, excl. ARC ⁵	200.2	276.5	183.4	183.4	119.7	205.9	205.8	153.5	293.0	316.1	179.4	179.4	185.1	358.2	358.2	361.2

Table 1 Nuclear In-service Capital Additions* (\$M)

Notes:

1 2010 to 2012 amounts are as shown at EB-2013-0321 Ex. D2-1-3, Table 4, line 8 and 16. 2010 to 2012 budget/plan and Board-approved amounts also are as shown at EB-2010-0008 Ex. B1-1-1, Chart 1. 2013 is as previously provided in EB-2013-0321 Ex. L4.7-17 SEC-50 Attachment 1, Table 4, line 16. 2014 and 2015 amounts are as shown at EB-2016-0152 Ex. D2-1-3, Table 4, line 8. 2013 to 2015 budget/plan and Board-approved amounts also are as shown at EB-2013-0321 Ex. B1-1-1, Chart 1, as adjusted to reflect reclassification of certain projects to Nuclear Operations from Darlington Refurbishment Program discussed in Ex. D2-2-10 Section 2.2.4 and Ex. L-4.3-1 Staff-71.

2 2010 to 2012 amounts are as shown at EB-2013-0321 Ex. D2-2-1, Table 6, line 9. 2013 to 2015 amounts are as shown at EB-2016-0152 Ex. D2-2-10, Table 5, line 6. 2013 to 2015 budget/plan and Board-approved amounts also are as shown at EB-2013-0321 Ex. B1-1-1, Chart 1, as adjusted to reflect reclassification of certain projects from Darlington Refurbishment Program to Nuclear Operations discussed in Ex. D2-2-10 Section 2.2.4 and Ex. L-4.3-1 Staff-71.

3 2010 to 2012 budget/plan and Board-approved amounts are as shown at EB-2010-0008 Ex. B1-1-1, Chart 1.

2013 to 2015 actual amounts are as shown at EB-2016-0152 Ex. L-6.9-1 Staff-183, Table 1.

4 2010 and 2011 actual amounts are primarily as explained at EB-2013-0321 Ex. B3-3-1 Table 1, Note 1.

2013 to 2015 actual amounts are explained in Ex. L-2.1-1 Staff-007.

5 2010 to 2012 actual amounts are as shown at EB-2013-0321 Ex. B3-3-1, Table 1, col. (b), lines 4, 10, and 16. 2010 to 2012 budget/plan and Board-approved amounts are as shown at EB-2010-0008 Ex. B3-3-1, Table 2, col. (b), lines 6, 12 and 18, adjusted to remove additions for proposed Darlington Refurbishment CWIP treatment of \$105.2M and \$255.8M in 2011 and 2012, respectively. 2013 to 2015 actual amounts are as shown at EB-2016-0152 Ex. B3-3-1, Table 1, col. (b), lines 5, 12 and 19. 2013 to 2015 budget/plan and Board-approved amounts are as shown at EB-2016-0152 Ex. B3-3-1, Table 1, col. (b), lines 5, 12 and 19. 2013 to 2015 budget/plan and Board-approved amounts are as shown at EB-2016-0152 Ex. B3-3-1, Table 1, col. (b), lines 5, 12 and 19. 2013 to 2015 budget/plan and Board-approved amounts are as shown at EB-2013-0321 Ex. B3-3-1, Table 2, col. (b), lines 4, 10 and 16.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 2 AMPCO-13 Attachment 1 Table 1

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 2 AMPCO-014 Page 1 of 1

AMPCO Interrogatory #14

3 Issue Number: 2.1

- 4 **Issue:** Are the amounts proposed for nuclear rate base (excluding those for the
- 5 Darlington Refurbishment Program) appropriate?
- 6 7 8

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Interrogatory

9 10 **Reference**:

- 11 Ref: B1-1-1 Table 2
- a) Please provide the budget, Board approved and Actual rate base for the years 2010 to2012.
- 15

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17 <u>Response</u>

a) The requested information is detailed in Table 1 of Attachment 1. As there were no
Board-approved amounts for 2010, none are shown. To assist with period-over-period
comparability of information, the 2011 and 2012 planned amounts exclude the rate base
treatment of Darlington Refurbishment CWIP proposed by OPG in EB-2010-0008 that
was not accepted by the OEB. These proposed rate base amounts were \$125.5M for
2011 and \$306.0M for 2012

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 2 AMPCO-014 Attachment 1 Table 1

Table 1Prescribed Facility Rate Base - Nuclear (\$M)

Numbers may not add due to rounding.

Line No.	Rate Base Item	2010 Budget ¹	2010 Actual ²	2011 Plan ¹	2011 Board- Approved ³	2011 Actual ²	2012 Plan ¹	2012 Board- Approved ³	2012 Actual ²
1	Gross Plant at Cost	5,355.3	5,391.1	5,547.1	5,547.1	5,563.9	5,741.7	5,741.7	6,098.6
2	Accumulated Depreciation and Amortization	2,278.8	2,286.8	2,500.3	2,500.3	2,498.5	2,745.4	2,745.4	2,751.7
3	Net Plant	3,076.5	3,104.3	3,046.7	3,046.7	3,065.4	2,996.3	2,996.3	3,347.0
4	Cash Working Capital	9.2	14.3	4.0	4.0	25.9	4.0	4.0	32.0
5	Fuel Inventory	357.3	335.0	379.8	379.8	345.4	360.9	360.9	340.7
6	Materials & Supplies	468.9	441.8	485.3	485.3	421.9	483.7	483.7	413.3
7	Total	3,912.0	3,895.3	3,915.8	3,915.8	3,858.6	3,844.9	3,844.9	4,132.9

Notes:

1 As shown in EB-2010-0008 Ex. B1-1-1 Table 2, col. (d) to (f), adjusted to remove from proposed rate base Darlington Refurbishment CWIP of \$125.5M and \$306.0M in 2011 and 2012 respectively.

2 As shown in EB-2013-0321 Ex. B1-1-1 Table 2, col. (a) to (c).

3 As shown in EB-2010-0008 Payment Amounts Order, Appendix A, Table 2, cols. (c) and (f), lines 1 to 4.

Numbers may not add due to rounding.

Filed: 2016-11-01 EB-2016-0152 Exhibit L Tab 2.1 Schedule 6 EP-004 Page 1 of 1

EP Interrogatory #4

3 Issue Number: 2.1

- 4 Issue: Are the amounts proposed for nuclear rate base (excluding those for the
- 5 Darlington Refurbishment Program) appropriate?
- 6 7

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8 Interrogatory

9

10 **Reference**:

- 11 Exhibit D2, Tab 1, Schedule 3, page 1
- 12
- 13 Can OPG complete the following table for tier 1 projects listed in the BSCs:
- 14

Project	Original forecast cost (before scope changes)	Actual cost	Original forecasted completion date (before scope changes)	Actual completion date

15

16 **<u>Response</u>**

17

18 Please refer to Ex. L-4.2-2 AMPCO-17, columns (f), (h), (d) and (e).

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 6 SEC-007 Page 1 of 1

SEC Interrogatory #7

3 Issue Number: 2.1

- 4 Issue: Are the amounts proposed for nuclear rate base (excluding those for the
- 5 Darlington Refurbishment Program) appropriate?
- 6 7

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8 <u>Interrogatory</u> 9

10 **Reference:**

11

Please provide a list of all capital projects, between 2016 and 2021 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.

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19 Response

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Except for the Darlington Refurbishment Program, there are currently no nuclear capital
 projects forecast for 2016 to 2021 which OPG believes qualify for treatment under O. Reg.
 53/05 and therefore to which the Capacity Refurbishment Variance Account ("CRVA") would

24 apply.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.1 Schedule 15 SEC-008 Page 1 of 1

1 SEC Interrogatory #8 2 3 **Issue Number: 2.1** 4 Issue: Are the amounts proposed for nuclear rate base (excluding those for the Darlington 5 Refurbishment Program) appropriate? 6 7 8 Interrogatory 9 10 **Reference:** 11 [https://news.ontario.ca/opo/en/2016/09/maximizing-the-value-of-publicly-owned-assets.html] 12 13 With respect to OPG's head office: 14 15 a. Please provide status of the sale of the head office. When does OPG expect the sale to 16 occur? 17 18 b. Please provide an estimate of the potential sale price of the head office. Please provide 19 copies of all appraisal reports OPG has obtained. 20 21 c. For the purpose of this application, what assumptions has OPG made regarding the sale 22 of the head office, including but not limited to changes in rate base, depreciation, and 23 OM&A. 24 25 d. Please explain how OPG has allocated the gains from the sale to ratepayers. 26 27 e. Please provide all shareholder guidance and/or instructions OPG has received regarding 28 the sale of the head office. 29 30 31 Response 32 33 a) Please refer to L-6.11-1 Staff-197, part (c). 34 35 b) OPG declines to provide the requested information on the basis of relevance. OPG's Head Office is not a prescribed facility and has never been included in OPG's rate base. 36 37 As such, the requested information does not underpin OPG's request for payment 38 amounts in this application and is not relevant to deciding any issue on the approved 39 Issues List. 40 41 c) OPG's Head Office is not a prescribed facility and has never been included in OPG's rate 42 base. As such, OPG has made no changes in rate base relating to the sale of its Head 43

Office. As discussed at Ex. F3-2-1, p. 4, line 23 to p. 5, line 7, OPG's 2016-20018
Business Plan assumes that the budgeted asset service fee for OPG's Head Office would
be discontinued effective April 1, 2016, at which point the asset service fee would be

- replaced by budgeted lease payments (see Real Estate OM&A costs in Ex. F3-1-1, Table
 7).
- 3 4
 - d) Please refer to L-6.11-1 Staff-197, part (d).
- 5
 6 e) Please refer to L-6.11-1 Staff-197, Attachment 1, which is a copy of the Shareholder
 7 Declaration and Resolution for the sale of OPG's head office at 700 University Avenue,
 8 Toronto.

Board Staff Interrogatory #8

1 2

3 **Issue Number: 2.2**

- 4 Issue: Are the amounts proposed for nuclear rate base for the Darlington
- 5 Refurbishment Program appropriate?
- 6
- 7
- 8 Interrogatory

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10 **Reference:**

- 11 Ref: Exh D2-2-10, page 23 and Table 5
- 12

13 The following table shows the budgeted, actual and approved in-service additions to

- 14 rate base for the DRP:
- 15

(in n	nillions)	2013 Budget	2013 Actual	2014 Approved	2014 Actual	2015 Approved	2015 Actual			2018 Proposed	2019 Proposed	2020 Proposed	2021 Proposed
DRP		104.2	\$99.2	\$18.7	\$43.5	\$143.4	\$147.1	\$350.4	\$374.4	\$8.9	\$0.0	\$4,809.2	\$0.4
Note: in 20	Note: in 2015 approved capital in-service additions were 209.2 however \$66M was for OSB and AHS which were moved to Nuclear Operations											tions	
Source: E	xhibit D2-2	2-10 Table 5											

16 17

The referenced evidence explains that 2014 and 2015 actual in-service additions weregreater than approved due to a number of projects being advanced or delayed.

19

a) In the Decision with Reasons for EB-2013-0321, the OEB approved \$18.7M for 2014 for
 the projects listed below. In explaining the 2015 Actual versus 2015 OEB Approved
 variances, OPG details the following variances for each of the projects. Please complete
 the following table by providing the actual in-service addition amounts. If there are other
 projects not included in the list, please provide details.

25

Project	Approved in Service	Variance	Actual
Water & Sewer	\$12.2M	+\$10.7M from 2013	?
Elec. Power Distribution System	\$4.4M	-\$4.4M	\$0
Other Station Modifications	\$2.1M	-\$2.1M	\$0
Heavy Water Facility related		+\$14.6	?
Vehicle Screening Facility		+\$4.1M	?
Other projects?			?
Total	\$18.7M	\$22.9M	\$43.5M

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28 29

b) In the Decision with Reasons for EB-2013-0321, the OEB approved \$209.4M-\$66M

=\$143.4M for 2015 for the projects listed below. Please complete the following table as per part a) above.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.2 Schedule 1 Staff-008 Page 2 of 4

1

Project	Approved in Service	Variance	Actual
D2O Storage	\$83.5M	-\$83.5M	\$0M
Elec. Power Distribution System	\$6.2M	+\$9.3M	?
Safety Improvement Opportunities	\$42.7M		?
Other Station Modifications	\$11.1M		?
Refurbished Project Office and Retube and Feeder Replacement Island Support Annex		+\$96M	?
Emergency Power Generator, Containment Filtered Venting System, Islanding D2O Management System		-\$36M	?
Powerhouse Steam Venting System, Emergency Service Water Buried Services		+\$18M	?
Other projects?			?
Total	\$143.4M	\$3.8M	\$147.1M

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c) In the Decision with Reasons for EB-2013-0321, the approved \$18.7M and \$143.4M (after adjustment) for DRP were identified as campus plan projects i.e. facilities and infrastructure. The Decision also stated that "[t]he Board has considered this evidence and agrees that the campus plan projects described are useful to the on-going operations of Darlington." Please explain why some campus plan projects are considered to be part of the DRP while others are part of Nuclear Operations.

8 9 10

11 **Response**

12

a) The numbers referred to in the question were presented to explain the 2014 Actual
 versus the 2014 OEB Approved in service amounts. The requested variance table is
 completed below:

1

Project	Approved in Service (\$M)	Variance (\$M)	2014 Actual (\$M)		
Water & Sewer	12.2	10.7	22.9		
Elec. Power Distribution System	4.4	(4.4)	0		
Other Station Modifications	2.1	(2.1)	0		
Heavy Water Facility		14.6	14.6		
Vehicle Screening Facility		4.1	4.1		
Darlington Energy Complex		1.8	1.8		
Total	18.7	24.8	43.5		

Note: The numbers may not add due to rounding.

b) The requested 2015 Actual versus 2015 OEB Approved variance table is completed below:

Project	Approved in Service (\$M)	Variance (\$M)	2015 Actual (\$M)
Heavy Water Facility	83.5	(83.5)	0
Elec. Power Distribution System	6.2	9.3	15.5
Refurbished Project Office		94.3	94.3
Retube and Feeder Replacement Island Support Annex		1.7	1.7
Emergency Power Generator	32.5	(22.8)	9.7
Containment Filtered Venting System	10.2	(10.2)	0
Powerhouse Steam Venting System		5.2	5.2
Emergency Service Water Buried Services		13.3	13.3
IFB Heat Exchanger Plate Replacement		6.2	6.2
Other Station Modifications	11.1	(9.9)	1.2
Total	143.4	3.7	147.1

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c) Campus Plan (Facility and Infrastructure) projects that are deemed necessary for the execution of the DRP, such as the Darlington Energy Centre, the Refurbishment Project Office or the Heavy Water Facility are included within the DRP. Other projects, not required in order to execute the DRP, but which are necessary for first life operations and outage requirements (as well as during the extended life of the station), such as refurbishment of the Operations Support Building, are considered Nuclear Operations. Consistent with the OEB's EB-2013-0321 Decision with Reasons cited in the question,

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.2 Schedule 1 Staff-008 Page 4 of 4

- 1 the projects deemed necessary for the execution of the DRP are not exclusively used for
- 2 DRP purposes, but also support first life operations and are expected to remain useful to
- 3 OPG's current or future nuclear operations irrespective of whether the DRP is completed.

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.2 Schedule 1 Staff-009 Page 1 of 2

Board Staff Interrogatory #9

- 3 **Issue Number: 2.2**
- 4 Issue: Are the amounts proposed for nuclear rate base for the Darlington Refurbishment
- 5 Program appropriate?
- 6

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8
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9 10 **Reference:**

11 2.2-Staff-9

12 Ref: Exh D2-2-10, Table 5 Ref: Exh D2-2-4, Figure 1

13

14 The first reference above shows in-service capital additions for the DRP. In EB-2013-0321,

Exhibit L, Tab 4.9, Schedule 1, Staff-048, OPG provided the following Chart: 15

19 18

DRP projects wholly or partially in service in the test period (\$millions)	Final In service year	Partial in- service years	Projected Total Capital Expenditure	Amount in 2014 Rate Base	Amount in 2015 Rate Base	Dep'n in 2014 Rev Req ¹	Dep'n in 2015 Rev Req ¹	Amount recorded in Capacity Refurb
Darlington Energy Complex	2013		105.	92.0	89.6	2.4	2.4	6.8
Water and Sewer Project	2014	2012,	36.0	20.8	26.4	0.4	0.6	1.5
Heavy Water Storage & Drum Handling Facility	2015		108.	-	20.3	-	1.1	-
Darlington Operations Support Building Refurb	2015		46.8	-	14.6	-	0.4	-
Auxiliary Heating System	2015		45.6	-	17.9	-	0.5	-
Electrical Power Distribution System	2015	2014	17.8	2.2	7.3	0.1	0.2	0.1
Powerhouse Steam Venting System	2015		10.2	-	5.0	-	0.1	-
Third Emergency Power Generator Project	2015		32.5	-	16.0	-	0.4	-
Container Venting System Project			-	-	-	-	-	-
Other Miscellaneous Projects		2014,	13.2	1.0	7.5	0.0	0.2	-
TOTAL			415.	116.	204.	3.0	6.1	8.4

Note: Account records variances between actual capital and non capital and firm capital commitment incurred for the DRP and the corresponding forecasts reflected in the revenue requirement approved by the OEB

¹ Total depreciation as shown in Ex. F4-1-1, Table 2, Note 1.

² Includes income tax impacts related to cost of capital and depreciation account additions. Does not reflect CCA variances, as CCA is claimed for all eligible DRP expenditures pursuant to an election under the Income Tax Act (Canada) noted in Ex. D2-2-1, p. 29, note 2. Interest on the outstanding account balance is also excluded.

19

Witness Panel: Finance, D&V Accounts, Nuclear Liabilities, Cost of Capital

Filed: 2016-10-26 EB-2016-0152 Exhibit L Tab 2.2 Schedule 1 Staff-009 Page 2 of 2

- 1 Please provide a similar chart, updated to include the actual amounts included in rate base
- 2 for DRP from 2012 to 2015 and the proposed amounts from 2016 to 2021
- 3
- 4
- 5 <u>Response</u>
- 6
- 7 The updated chart requested is presented in Attachment 1.

Numbers may not add due to rounding DRP projects wholly or partially in service in the test	Final In service year	Partial In- Service Years	Total Project Cost	Actual Amount in Rate Base ¹				Planned Amount in Rate Base ¹						Actual Depreciation ²				Planned Depreciation in Revenue Requirement ²					
period (\$millions)	ycai			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Darlington Energy Complex	2013		105.4	-	46.1	77.8	75.1	71.9	68.7	65.0	61.3	57.6	53.9	-	2.0	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Water and Sewer Project	2015	2012, 2013	57.7	2.5	12.7	31.6	41.8	42.0	42.1	40.4	38.7	37.0	35.3	0.0	0.2	0.9	1.6	1.7	1.7	1.7	1.7	1.7	1.7
Heavy Water Storage & Drum Handling Facility	2017	2014	381.1	-	-	7.3	14.3	13.9	254.2	367.4	356.8	346.1	335.4	-	-	0.1	0.4	0.4	6.8	10.7	10.7	10.7	10.7
Electrical Power Distribution System	2015	2013	20.8	-	1.3	2.6	10.1	18.7	19.6	19.2	18.8	18.4	18.1	-	0.0	0.1	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Powerhouse Steam Venting System	2015		5.6	-	-	-	2.6	5.3	5.4	5.3	5.1	5.0	4.8	-	-	-	0.0	0.2	0.2	0.2	0.2	0.2	0.2
Third Emergency Power Generator Project	2016	2015	120.4	-	-	-	4.8	31.2	112.5	109.3	106.1	103.0	99.8	-	-	-	0.1	0.9	3.2	3.2	3.2	3.2	3.2
Containment Filtered Venting System	2016		80.3	-	-	-	-	29.6	78.4	76.5	74.3	72.0	69.8	-	-	-	-	0.8	2.2	2.2	2.2	2.2	2.2
Retube Feeder Replacement Island Support Annex	2015		40.7	-	-	-	0.9	21.4	40.5	39.4	38.3	37.1	36.0	-	-	-	0.0	1.0	1.1	1.1	1.1	1.1	1.1
Refurbishment Project Office	2016	2015	99.9	-	-	-	28.8	96.1	97.2	94.4	91.7	88.9	86.2	-	-	-	0.6	2.7	2.8	2.8	2.8	2.8	2.8
R&FR - Tooling for Removal Activities	2016		87.0	-	-	-	-	53.7	84.4	82.0	79.6	77.3	74.9	-	-	-	-	1.5	2.4	2.4	2.4	2.4	2.4
Shield Tank Overpressure Protection	2017	2016	13.5	-	-	-	-	3.4	10.1	13.4	13.1	12.7	12.4	-	-	-	-	0.1	0.3	0.4	0.4	0.4	0.4
Emergency Service Water Buried Services	2015		14.6	-	-	-	6.6	13.7	13.9	13.5	13.1	12.7	12.4	-	-	-	0.1	0.4	0.4	0.4	0.4	0.4	0.4
Darlington Refurbishment - Unit 2	2020		4,800.2	-	-	-	-	-	-	-	-	4,127.1	4,597.5	-	-	-	-	-	-	-	-	128.9	147.3
Other Miscellaneous Projects	Various		45.7	-	-	2.1	7.7	18.1	25.2	29.3	32.7	36.3	39.8	-	-	0.0	0.3	0.5	0.7	0.9	1.0	1.2	1.3
TOTAL			5,872.9	2.5	60.2	121.2	192.6	419.1	852.3	955.2	929.7	5,031.4	5,476.2	0.0	2.3	4.7	7.0	14.1	25.8	29.9	30.0	159.1	177.6

* Note: The Capacity Refurbishment Variance Account (CRVA) records variances between actual capital and non capital and firm capital commitment incurred for the DRP and the corresponding forecasts reflected in the revenue requirement approved by the OEB. Excludes certain projects reclassified from DRP to Nuclear Operation subsequent to the conclusion of EB-2013-0321 as further discussed in Ex. L-04.3-1 Staff 071 ¹ Total net plant rate base amounts are as shown at Ex. B3-1-1 Table 1, lines 2, 9, and 16.

² Total depreciation as shown at Ex. F4-1-1 Table 2, line 2.

³ Amounts represent CRVA additions recorded during 2015, which OPG seeks to clear in this application. Per the EB-2014-0370 Payment Amounts Order, account additions recorded prior to 2015 are scheduled to be recovered by December 31, 2016. Total 2015 addition shown are as per Ex. H1-1-1 Table 11: line 22 + line 25 and ROE component of cost of capital variance at line 22) x 25% / (1-25%). Amounts do not reflect CCA variances, as CCA is claimed for all eligible DRP expenditures. For ease of reconciliation, the EB-2013-0321 Ex. N1 Impact Statement (Ex. N1) Adjustment at Ex. H1-1-1 Table 11, line 34 is also excluded. Positive amounts rate payers; negative amounts are credited to ratepayers.

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Amount Recorded in CRVA in 2015 * ³	
0.3	
2.9	
0.1	
0.7	
0.2	
(0.5)
-	
0.1	
3.2	
-	
-	
0.7	
-	
(1.8)
5.9	
25 + (sum of line 25 s are recoverable from	