SEC Interrogatory #130

Interrogatory

Reference:
E1-2-1, p. 8, 9, 13, 15

Question(s):

Please update Charts 2-5 to include the latest month available.

Response

Updated versions of Charts 2, 3, and 5 are provided below. Refer to Ex. L-E1-Staff-142 for an updated version of Chart 4 – HIM Payments in Market Renewal.

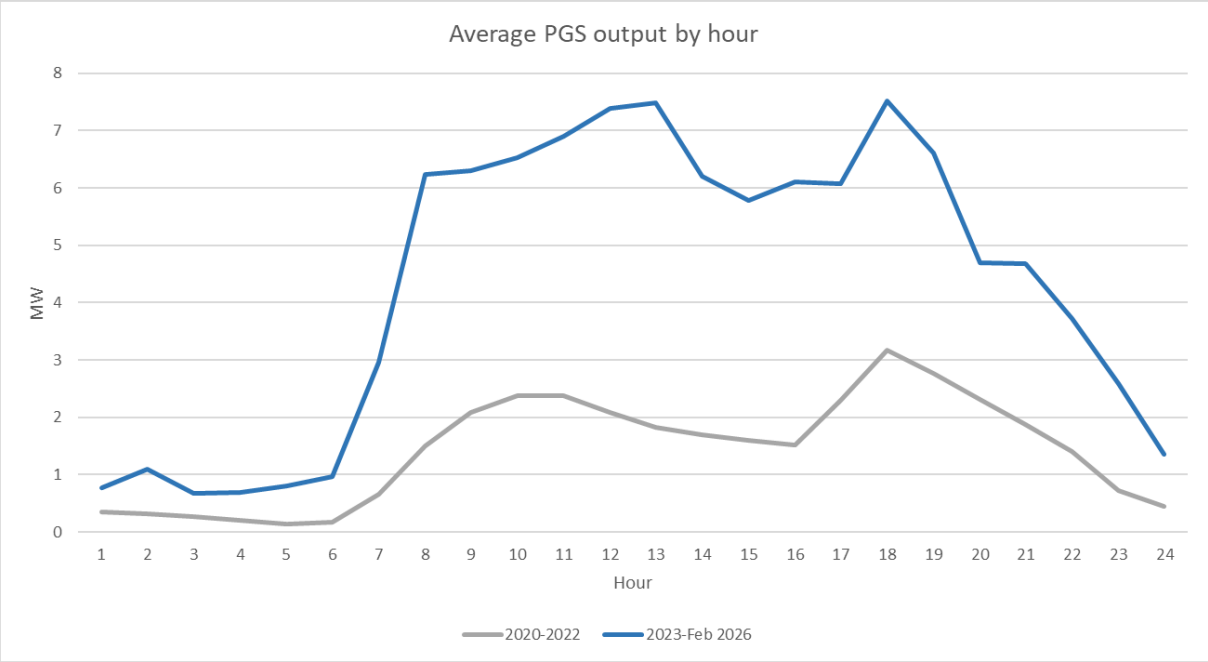
Updated Ex. E1-2-1 Chart 2
SBG Spill Booked to SBGVA (GWh)[1]

	2021	2022	2023	2024	2025	2026	Average
January	195	51	54	3	5	3	52
February	118	72	152	15	0	7	61
March	258	74	85	20	48		97
April	399	276	199	77	131		216
May	299	353	289	44	398		277
June	134	283	31	68	84		120
July	108	32	1	13	33		37
August	32	30	18	9	12		20
September	130	77	9	17	20		51
October	99	65	92	17	12		57
November	48	216	40	49	3		71
December	62	62	6	17	4		30
Total	**1,882**	**1,592**	**977**	**350**	**751**	**10**	**1,090**

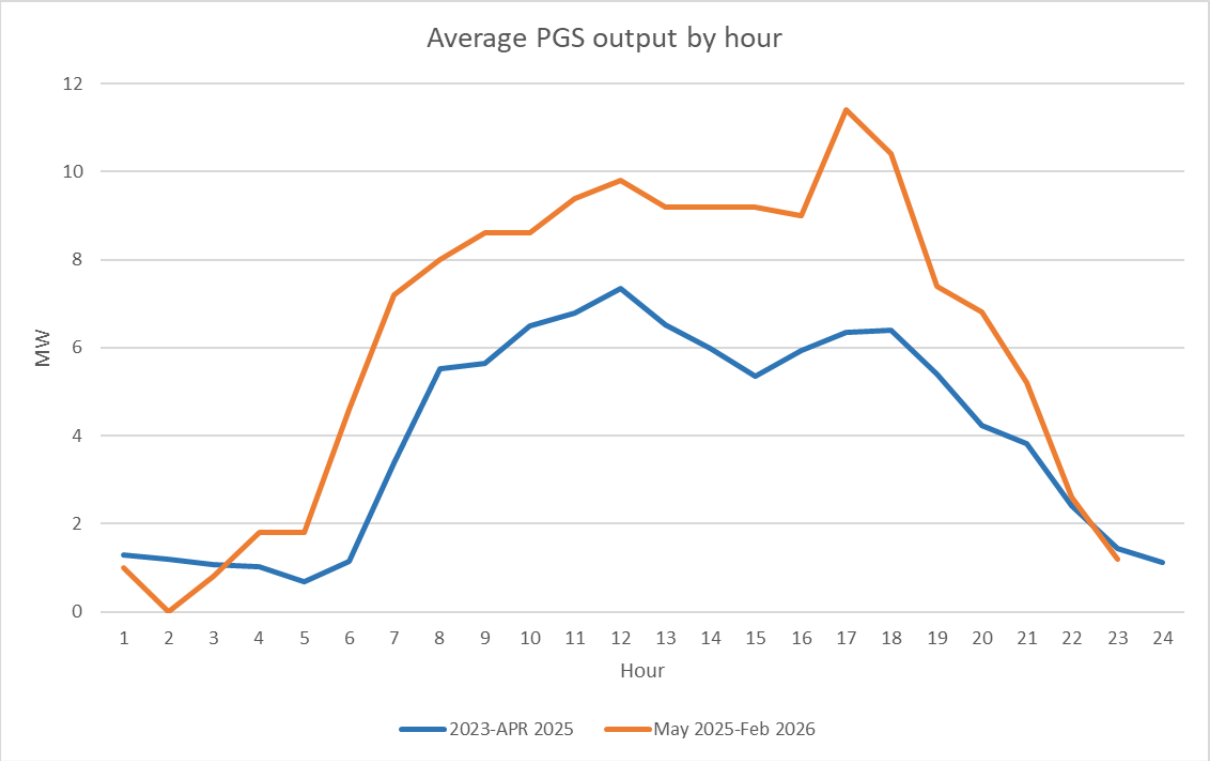
[1] The SBGVA amounts associated with spill for May to February 2026 as presented in Chart 2 are subject to a monthly $0.6M reduction in accordance with the OEB-approved EB-2023-0336 Settlement Proposal, which is applicable until the effective date of the payment amounts order in this Application.

Witness Panel: Hydroelectric Operations and Hydroelectric Projects, and Market Renewal Program

pdated Ex. E1-2-1 Chart 3
Average Pump Generating Station Output by Hour
(January 2020 – February 2026)



Updated Ex. E1-2-1 Chart 5
Average Pump Generating Station Output by Hour
(2023 – February 2026)



Board Staff Interrogatory #150

Interrogatory

Reference:
Ref 1: Exhibit H1 / Tab 1 / Schedule 1 / pp. 13-14
Ref 2: Exhibit H1 / Tab 1 / Schedule 1 / Attachment 4
Ref 3: Exhibit E1 / H-SEC-05 (EB-2023-0336)

Preamble:

At Reference 1, OPG notes that Surplus Baseload Generation (SBG) conditions were considered to be present when the uniform market price fell below the Gross Revenue Charge (GRC) price threshold. OPG also noted that the Surplus Baseload Generation Variance Account (SBGVA) debit entries in the account were $29.7 million in 2023 and $10.6 million in 2024. The applicable market price in those years was the Hourly Ontario Energy Price (HOEP).

At Reference 2, OPG provided a spreadsheet that includes the following information: Date, Hour, Foregone Production due to SBG, Addition to SBGVA, and HOEP. That information was provided for a total of 4,107 hours. Of those hours, based on a GRC of $14.40/MWh, there were 1,794 hours where HOEP exceeded the GRC, including 14 hours where HOEP was over $100/MWh. OEB staff notes that this Attachment 4 is provided to support clearance of the SBGVA.

At Reference 3, in an interrogatory response to SEC (in the EB-2023-0336 proceeding), OPG attempted to explain why the HOEP would exceed the GRC in some hours when the information in the spreadsheet was first requested. In that response, OPG noted "its SBG spill algorithm" begins with "quantifying SBG spill in hours when HOEP is less than the applicable GRC". OEB staff does not fully understand the remainder of OPG's response. For example, it states the algorithm "allocates this spill as SBG spill <u>if in a previous</u> SBG hour within that day, the algorithm identifies energy that would have been generated absent SBG conditions but was not realized as actual spill". OPG further noted that, for that reason, the attachment to the interrogatory response "shows SBG entries in hours when HOEP exceeds OPG's applicable GRC <u>rather than the originating hour</u>". [emphasis added]

Question(s):

a) Is the "originating hour" the hour when the SBG event began? If so, why would the "previous" hour be considered an SBG hour and the appropriate hour for the SBGVA entry?

b) Given the Legacy Market was a real-time market and the underlying intent of the SBGVA is to compensate OPG for forgone production where OPG needs to spill water (rather than produce energy) in the applicable hours, please explain why the hour associated with the SBGVA entry is the "previous hour" rather than the same hour as the hour where OPG's algorithm is "quantifying SBG spill in hours when HOEP is less than the applicable GRC".

c) Please modify Attachment 4 (i.e., Reference 2) by adding a column that includes the HOEP for the "previous" hour.

Response

a) As discussed in EB-2023-0336, Ex. L-H-SEC-05, "previous SBG hour" and "originating SBG hour" refer to the same hour, namely an hour preceding (e.g., earlier in the day) the hour when spill is booked into the SBGVA. In such "originating SBG hour", while SBG conditions are present causing a resource to forgo generation, instead of being spilled, water is stored based on storage availability. The hour when SBG is booked into the SBGVA is an hour following this "originating SBG hour", when the water previously stored because of prior SBG conditions is spilled.

b) As explained in a), during an SBG hour (i.e., any hour where HOEP/LMP ≤ GRC), OPG stores as much water as possible before spilling. OPG's spill algorithm accounts for the fact that water stored during an SBG hour may be forced to be spilled later in the day, in an hour when the HOEP has risen above GRC. In these instances, if the spill did not originate for any other identifiable reason, the spill tool records that spill as SBG to the extent that the resource had available capacity during SBG hours earlier in the day but was storing water instead of generating or spilling it.

c) Refer to Attachment 1, filed in Microsoft Excel format.

SEC Interrogatory #137

Interrogatory

Reference:
E2
EB-2020-0290, E2-01-CCC-43

Question(s):

Please expand E2-01-CCC-43 Attachment 1 and Attachment 2 (EB-2020-0290) to include 2021-2026 approved and actual/budgets, as well as 2027-2031 forecast amounts.

Response

Refer to Attachment 1.

Numbers may not add due to rounding

Chart 1 - Outage Days Metrics 2008-2031 By Nuclear Unit

	Actuals																		Forecast[8]					
Operating Unit	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**[11]	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Darlington Unit 1																								
PO Days (excludes Refurb)	69.1	30.1	0.0	55.4	0.0	0.0	75.3	47.4	0.0	98.8	0.0	0.0	0.0	77.9	0.0	0.0	0.0	21.7	0.0	60.9	120.2	0.0	15.0	124.2
FEPO Days	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	0.0	4.9	0.0	0.0	2.1	24.5	0.0	12.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Total	69.1	30.1	0.0	60.3	0.0	0.0	77.4	73.7	0.0	110.9	4.8	0.0	0.0	77.9	0.0	0.0	0.0	22.9	0.0	60.9	120.2	0.0	15.0	124.2
Darlington Unit 2																								
PO Days (excludes Refurb)	0.0	32.0	61.7	0.0	0.0	77.9	0.0	50.3	0.0	0.0	0.0	0.0	0.0	0.0	45.1	0.0	86.5	0.0		360.0	6.3	15.0	124.2	0.0
FEPO Days	0.0	3.2	0.0	0.0	0.0	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	35.2	61.7	0.0	0.0	97.6	2.8	50.3	2.8	0.0	0.0	0.0	0.0	0.0	45.1	0.0	92.0	0.0	0.0	360.0	6.3	15.0	124.2	0.0
Darlington Unit 3																								
PO Days (excludes Refurb)	0.0	79.5	0.0	0.0	56.2	0.0	0.0	95.8	19.6	0.0	82.7	0.0	33.0	0.0	0.0	0.0	0.0	0.0	266.7	45.9	15.0	124.2	0.0	15.0
FEPO Days	0.0	7.7	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	4.9	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	87.2	4.9	0.0	56.8	0.0	0.0	101.6	19.6	0.0	82.7	0.0	34.3	0.0	0.0	0.0	7.1	0.0	266.7	45.9	15.0	124.2	0.0	15.0
Darlington Unit 4																								
PO Days (excludes Refurb)	0.0	28.7	56.5	0.0	0.0	66.6	0.0	48.8	87.7	0.0	24.6	84.9	0.0	77.6	0.0	0.0	0.0	0.0	20.0	45.9	0.0	74.9	0.0	0.0
FEPO Days	0.0	1.0	13.9	0.0	0.0	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	6.8	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	29.7	70.4	0.0	6.8	86.7	11.8	48.8	87.7	0.0	24.6	84.9	0.0	77.6	0.0	0.0	0.0	0.0	20.0	45.9	0.0	74.9	0.0	0.0
Darlington All Units																								
PO Days (excludes Refurb)	69.1	170.3	118.2	55.4	56.2	144.5	75.3	242.3	107.3	98.8	107.3	84.9	33.0	155.6	45.1	0.0	86.5	21.7	286.7	512.7	141.5	214.1	139.2	139.2
FEPO Days	0.0	11.9	13.9	0.0	0.0	39.8	0.0	7.7	0.0	0.0	2.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	4.9	4.9	7.4	0.0	16.7	24.5	2.8	12.1	2.0	0.0	0.0	0.0	0.0	0.0	12.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Darlington Total	69.1	182.2	137.0	60.3	63.6	184.3	92.0	274.5	110.1	110.9	112.1	84.9	34.3	155.6	45.1	0.0	99.0	22.9	286.7	512.7	141.5	214.1	139.2	139.2
Pickering Unit 1																								
PO Days	0.0	0.0	98.0	0.0	106.3	0.0	0.0	101.7	0.0	133.1	2.9	0.0	157.9	0.0	113.1	5.4	0.0	-	-	-	-	-	-	-
FEPO Days	1.1	0.0	12.3	0.0	9.9	109.7	0.0	17.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Total	1.1	0.0	110.3	0.0	116.2	109.7	0.0	145.6	0.0	133.1	2.9	0.0	157.9	0.0	113.1	5.4	0.0	-	-	-	-	-	-	-
Pickering Unit 4																								
PO Days	0.0	74.0	46.5	80.9	0.0	20.0	85.3	0.0	107.8	29.3	112.3	0.0	121.6	0.0	30.8	88.2	0.0	-	-	-	-	-	-	-
FEPO Days	0.0	32.5	0.0	6.8	7.4	4.5	34.3	0.0	31.9	0.0	0.0	0.0	13.0	0.0	0.0	2.0	0.0	-	-	-	-	-	-	-
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	31.7	-	-	-	-	-	-	-
Total	0.0	106.5	46.5	87.7	25.4	24.5	119.6	0.0	139.7	29.3	112.3	0.0	134.6	0.0	36.7	90.2	31.7	-	-	-	-	-	-	-
Pickering Unit 5																								
PO Days	0.0	57.3	41.9	113.0	0.0	87.8	0.0	105.9	0.0	121.6	0.0	115.9	0.0	0.0	160.5	0.0	90.1	0.0	0.0	0.0	0.0	0.0	0.0	55.0
FEPO Days	5.3	27.7	0.0	63.9	0.0	53.4	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	7.0	85.0	41.9	176.9	0.0	141.2	0.0	120.6	0.0	121.6	0.0	115.9	0.0	33.7	161.6	0.0	90.1	0.0	0.0	0.0	0.0	0.0	0.0	55.0
Pickering Unit 6																								
PO Days	0.0	68.2	39.4	101.1	0.0	113.0	0.0	102.4	1.4	0.0	124.0	0.0	119.4	12.7	28.7	119.6	0.0	73.6	15.0	0.0	0.0	0.0	0.0	0.0
FEPO Days	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	68.2	39.4	101.1	0.0	113.0	0.0	102.4	17.6	0.0	124.0	0.0	119.4	12.7	28.7	119.6	0.0	79.9	15.0	0.0	0.0	0.0	0.0	0.0
Pickering Unit 7																								
PO Days	0.0	0.0	117.2	0.0	104.4	0.0	113.9	0.0	117.5	0.0	0.0	109.6	0.0	108.8	26.6	0.0	153.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FEPO Days	0.0	0.0	2.2	0.0	0.0	0.0	7.5	8.5	3.9	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	25.7	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	119.4	0.0	104.4	0.0	121.4	8.5	121.4	11.6	0.0	109.6	19.3	134.5	26.6	28.6	153.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pickering Unit 8																								
PO Days	60.4	0.0	76.4	0.0	97.4	0.0	85.7	0.0	142.6	0.0	109.9	0.0	0.0	154.5	28.2	113.9	7.5	0.0	95.8	0.0	0.0	0.0	0.0	0.0
FEPO Days	13.2	0.0	7.0	0.0	8.9	0.0	13.6	0.0	41.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	0.0	40.6	0.0	7.9	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	73.6	0.0	83.4	0.0	106.3	0.0	99.3	13.4	184.0	40.6	109.9	7.9	31.8	154.5	28.2	113.9	7.5	0.0	95.8	0.0	0.0	0.0	0.0	0.0
Pickering All Units																								
PO Days	60.4	199.5	419.4	295.0	308.1	220.8	284.9	310.0	369.3	284.0	349.1	225.5	398.9	276.1	387.9	327.1	251.3	73.6	110.8	0.0	0.0	0.0	0.0	55.0
FEPO Days	19.6	60.2	21.5	70.7	26.2	167.6	55.4	40.5	93.4	11.6	0.0	0.0	13.0	0.0	1.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unbudgeted Planned Outage	1.7	0.0	0.0	0.0	18.0	0.0	0.0	40.0	0.0	40.6	0.0	7.9	51.1	59.4	5.9	28.6	31.7	6.3	0.0	0.0	0.0	0.0	0.0	0.0
Pickering Total	81.7	259.7	440.9	365.7	352.3	388.4	340.3	390.5	462.7	336.2	349.1	233.4	463.0	335.5	394.9	357.7	283.0	79.9	110.8	0.0	0.0	0.0	0.0	55.0

Numbers may not add due to rounding

Chart 2 - Outage Days and Production Variance and Revenue Deficiency by Station and Year

	2008[1]	2009[1]	2010[2]	2011[3]	2012[3]	2013[4]	2014[5]	2015[5]	2016[4]	2017[6]	2018[6]	2019[6]	2020[6]	2021[6]	2022[7]	2023[7]	2024[7]	2025[7]	2026[7,12]	2027[8]	2028[8]	2029[8]	2030[8]	2031[8]
Pickering OEB Approved PO Days	179.0	176.0	436.0	304.0	247.0	303.5	292.9	287.9	401.6	541.6	530.8	517.2	498.9	562.8	487.2	371.1	270.2	35.0	0.0	0.0	0.0	0.0	0.0	55.0
Darlington OEB Approved PO Days	75.1	171.7	118.8	68.3	65.5	144.4	77.1	188.0	111.0	148.4	143.3	119.1	183.2	51.2	73.0	112.2	55.0	268.0	59.1	512.7	141.5	214.1	139.2	139.2
Pickering Variance (days) (Actual - OEB/Appr.)	(97.3)	83.7	4.9	61.7	105.3	84.9	47.4	102.6	61.1	(205.4)	(181.7)	(283.8)	(35.9)	(227.3)	(92.3)	(13.4)	12.8	44.9	110.8	0.0	0.0	0.0	0.0	0.0
Pickering Variance (TWh) (Actual - OEB/Appr.)	(1.2)	1.0	0.1	0.8	1.3	1.1	0.6	1.3	0.8	(2.5)	(2.2)	(3.5)	(0.4)	(2.8)	(1.1)	(0.2)	0.2	0.56	1.4	0.0	0.0	0.0	0.0	0.0
Darlington Variance (days) (Actual - OEB/Appr.)	(6.0)	10.5	18.2	(8.0)	(1.9)	39.9	14.9	86.5	(0.9)	(37.5)	(31.2)	(34.2)	(148.9)	104.4	(27.9)	(112.2)	44.0	(245.1)	227.6	0.0	0.0	0.0	0.0	0.0
Darlington Variance (TWh) (Actual - OEB/Appr.)	(0.1)	0.2	0.4	(0.2)	(0.0)	0.8	0.3	1.8	(0.0)	(0.8)	(0.7)	(0.7)	(3.1)	2.2	(0.6)	(2.4)	0.9	(5.2)	4.8	0.0	0.0	0.0	0.0	0.0
Total Variance (TWh)	(1.3)	1.3	0.4	0.6	1.3	1.9	0.9	3.1	0.7	(3.3)	(2.9)	(4.2)	(3.6)	(0.6)	(1.7)	(2.5)	1.1	(4.6)	6.2	0.0	0.0	0.0	0.0	0.0
Revenue Rate ($/MWh) [9]	53.0	53.0	53.0	51.5	51.5	51.5	52.8	59.3	59.3	70.2	78.6	77.0	85.0	89.7	104.1	107.8	103.5	102.9	111.3	206.8	192.5	203.2	200.0	220.7
Revenue Deficiency ($M) [10]	(50.2)	62.4	21.8	28.1	59.3	89.2	43.8	170.4	40.5	(219.2)	(215.9)	(308.6)	(289.9)	(52.7)	(173.5)	(262.4)	107.4	(450.2)	649.8	0.0	0.0	0.0	0.0	0.0

[1] OPG Approved Budget, Ref. EB 2010-008 E2-1-2 Table 1a, 1b

[2] OPG Budget, Ref. EB 2013-0321 E2-1-2 Table 1

[3] Ref. EB 2013-0321 E2-1-2 Table 1

[4] OPG Budget, Ref. EB 2016-0152 E2-1-2 Table 1

[5] Ref. EB 2016-0152 E2-1-2 Table 1

[6] Ref. L-A1-2-Staff-002 / EB-2020-0290

[7] OPG Plan, Ref. EB 2020-0290 E2-1-2 Table 1a, 1b

[8] OPG Plan, Ref. EB 2025-0297 E2-1-2 Table 1a, 1b

[9] 2014 is at rate of $52.82/MWh (10 months at Board approved rate of $51.52/MWh and 2 months at Board approved rate of $59.29/MWh)
2017 is at rate of $70.18 (5 months at Board approved rate of $59.29/MWh and 7 months at Board Approved rate of $77.96)

[10] Revenue Deficiency adjusted for fuel. Revenue Deficiency in 2008 has been adjusted to reflect 9 months per OEB approved rates April 1 2008
Ref. EB-2025-0297 F2-5-1 Table 1a for 2022-2026 fuel costs

[11] Ref. L-E2-STAFF-153 / EB-2025-0297

[12] 2026 TWh variance does not reflect the higher production (Ref. EB-2025-0297 E2-1-2 Table 1b) from Pickering 5-8 extended operation from January 1 to September 30, 2026 as the associated revenue will be refunded to ratepayers through the Pickering B Variance Account

SEC Interrogatory #138

Interrogatory

Reference:
E2-1

Question(s):

Please provide the production forecast (TWh) for each year between 2021 and 2031 (actual/budget and forecast) by nuclear unit.

Response

Refer to Attachment 1.

Numbers may not add due to rounding.

Production Forecast Trend - Nuclear By Unit (TWh)

Line No.	Prescribed Facility	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Actual	2026 Budget	2027 Plan	2028 Plan	2029 Plan	2030 Plan	2031 Plan
1	Darlington NGS Unit 1	5.5	0.8	0.0	0.4	6.9	7.2	6.1	4.9	7.4	7.1	4.9
2	Darlington NGS Unit 2	7.2	6.0	7.2	4.9	7.5	7.4	0.0	7.4	7.1	4.8	7.6
3	Darlington NGS Unit 3	-0.1	0.0	3.3	6.4	7.2	1.9	6.4	7.1	4.8	7.6	7.2
4	Darlington NGS Unit 4	5.9	7.1	4.1	-0.1	-0.1	4.6	6.2	7.3	5.8	7.4	7.4
5	Pickering NGS Unit 1	4.2	3.0	4.2	3.3	-	-	-	-	-	-	-
6	Pickering NGS Unit 4	4.3	4.0	3.3	4.2	-	-	-	-	-	-	-
7	Pickering NGS Unit 5	3.2	2.4	4.2	2.7	4.1	3.2	0.0	0.0	0.0	0.0	2.0
8	Pickering NGS Unit 6	4.2	4.0	2.9	4.5	3.4	3.0	0.0	0.0	0.0	0.0	0.0
9	Pickering NGS Unit 7	2.8	4.1	4.3	2.6	4.5	3.2	0.0	0.0	0.0	0.0	0.0
10	Pickering NGS Unit 8	2.4	3.9	2.6	4.1	4.5	1.9	0.0	0.0	0.0	0.0	0.0
11	**Total**	**39.6**	**35.3**	**36.1**	**33.0**	**38.1**	**32.5**	**18.7**	**26.7**	**25.1**	**26.8**	**28.9**

12	* DNNP-1	-	-	-	-	-	-	-	-	-	0.5	1.9
13	**DNNP - Total**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.5**	**1.9**

* DNNP: Darlington New Nuclear Project

Board Staff Interrogatory #153

Interrogatory

Reference:
Ref 1: Exhibit E2 / Tab 1 / Schedule 2 / Table 1a and 1b

Preamble:

Reference 1 provides OEB-approved and actual nuclear production and other information between 2020 and 2025. The values for 2025 are budgeted.

Question(s):

a) Please update the tables at References 1 with actual values for 2025.

Response

a) Refer to Ex. L-A1-CCC-001, Attachment 1, Tables 30 and 31.

VECC Interrogatory #010

Interrogatory

Reference:
Exhibit E2, Tab 1, Schedule 2, page 15 / Table 1b

Preamble:

"Notwithstanding the recent FLR performance at Darlington, and the need to execute major replacement and rehabilitation projects in support of post-refurbishment operations during the IR term, Darlington continues to target an improved FLR performance, set at 2.0% FLR over the 2028-2031 period once Units 1 and 4 enter their third year of post-refurbishment operations."

Question(s):

a) Please confirm (or correct) that a FLR rate is included as an adjustment (downward) in nuclear power production.

b) The above reference indicates that a 2.0% FLR rate is being applied over the 2028-02031 period to the Darlington NGS. At Table 1b it shows (line 6) a FLR rate for Darlington NGS of 2.9% in 2027, 2.2% for 2028 and 2.0% only beginning in 2029. Please explain why the 2027 and 2028 FLR rate is higher than 2.0%.

c) What would be the impact in production if the FLR rate for 2027 and 2028 were set at 2.0%?

Response

a) Confirmed.

b) The FLR rates for 2027 (2.9%) and 2028 (2.2%) reflect the average FLR target for the station, which is higher than 2.0% because Darlington Units 1 and 4 will not have reached the third year of post-refurbishment operations until 2028 and 2029, respectively. As discussed in Ex. E2-1-1, Section 3.1, p. 11, lines 24-29, post-refurbishment FLR targets are above 2.0% during the first two years of post-refurbishment operations, reflecting industry operational experience. In 2027 and 2028, only Units 2 and 3 have a 2.0% sustaining FLR target, and in 2028 Unit 1 also has a 2.0% FLR target, as these Darlington units will have reached their third year of post-refurbishment operations.

c) While it would not be appropriate to set the FLR target to 2.0% for the entire station for the reasons described in part b), if the FLR rate for 2027 and 2028 were set at 2.0% for the entire station, the impact to forecast production would be an increase of 0.19 TWh in 2027 and 0.05 TWh in 2028, respectively.