

CASH WORKING CAPITAL

1.0 PURPOSE

This evidence presents OPG's methodology for calculating cash working capital and the forecast of cash working capital amounts included in OPG's regulated hydroelectric rate base and its nuclear rate base for the 2027-2031 period.

2.0 OVERVIEW

As part of its EB-2020-0290 application, OPG retained Navigant Consulting Inc. ("Navigant") to prepare a lead-lag study (the "Navigant Study") to determine OPG's lead/lag days for cash working capital purposes.¹ The Navigant Study was based on an analysis of 2018 financial information, which Navigant used to determine the revenue lag days and expense lead days for appropriate revenue and cost components of OPG's regulated hydroelectric and nuclear businesses. OPG applied the resulting net lag days to the actual financial results for the nuclear business for 2019, being the most recent historical year at the time, to calculate a nuclear cash working capital amount in the EB-2020-0290 application, which was reflected in the approved rate base used to set the nuclear payment amounts in that proceeding. Prior to the Navigant Study, OPG's cash working capital amounts were based on a lead-lag analysis previously conducted by OPG based on 2006 financial information as part of the EB-2007-0905 application.

In this Application, OPG continues to apply the same methodology and lead/lag days as in EB-2020-0290 to revenue and expense information from the most recent available historical year to determine the cash working capital amounts. OPG continues to rely on the Navigant Study given that (i) cash working capital remains a relatively small component of rate base,² (ii) the relatively limited passage of time since the study was conducted, and (iii) neither the OEB approved settlement proposal in EB-2020-0290 nor the OEB's filing guidelines issued in EB-2024-0136 contemplate a new lead-lag study.

¹ EB-2020-0290, Ex. B1-1-2, Attachment 1.

² For example, cash working capital comprises approximately 0.1% of OPG's forecasted nuclear rate base and 0.2% of OPG's forecasted hydroelectric rate base over the 2027-2031 period, on average.

For purposes of the Application, the net lag days determined in the Navigant Study were applied to the actual financial results for OPG's regulated hydroelectric and nuclear businesses for 2024 to calculate the respective cash working capital amounts to be used for the 2027-2031 period, as summarized in Chart 1 and reflected in Ex. B2-5-1, Table 2, and Ex. B3-5-1, Table 2.³

As in prior OPG proceedings, the cash working capital amount includes a Generation Revenue component and a Harmonized Sales Tax ("HST") component. These components were determined using the same methodologies as in prior applications and are discussed in Sections 3.0 and 4.0 below.

Chart 1 Summary of Results - Cash Working Capital - OPG (\$M) 2027 through 2031			
Line No.	Item	Regulated Hydroelectric	Nuclear
1	Generation Revenue	43.6	19.2
2	HST	(24.4)	(41.7)
3	Total	19.3	(22.5)

The proposed cash working capital amount for the regulated hydroelectric business is \$19.3M, which is lower than the amount of \$30.0M⁴ last approved by the OEB, in the EB-2013-0321 payment amounts order. The proposed cash working capital amount for OPG's nuclear business is (\$22.5M), which is somewhat less negative than the (\$37.8M) reflected in the EB-2020-0290 payment amounts order. This is attributed to the application of the lead/lag days to the full amount of deemed long-term debt interest expense, rather than only the existing long-

³ OPG accounted for the impact of leap years by utilizing 366 days in the calculation of the cash working capital amounts in such years. Any such impacts are immaterial.

⁴ EB-2013-0321 Payment Amounts Order: Sum of App. A, Table 1, line 3, col. (f) and App. A, Table 2, line 3, col. (f).

term debt interest expense. This approach is consistent with the OEB-approved deemed capital structure.

3.0 GENERATION REVENUE

The Navigant Study analyzed the time between the date OPG supplies electricity from its prescribed assets and the date it receives payment from the IESO ("revenue lag"), and the time between which OPG receives goods and services from vendors, employees or other payees and pays for them at a later date ("expense lead"). The study applied the mid-point method to services provided by (or to) OPG over a period of time, including electricity sales.

Navigant's calculation of the revenue lag days considered that OPG receives payment from the IESO on a monthly basis, in accordance with the IESO Settlement Schedule & Payments Calendar. The payment date for a given month's generation occurs approximately 20 days into the following month. Applying the mid-point method to generation sales means that OPG is considered to have provided service equally over the month. Combining this with the IESO payment schedule resulted in a revenue lag of 35.40 days for the regulated hydroelectric business and 35.46 days for the nuclear business.

Expense lead days were determined by the Navigant Study for each major category of costs not otherwise considered in the calculation of rate base.

As shown in Charts 2a and 2b below, the difference between the revenue lag days and the expense lead days ("net lead/lag days") is multiplied by the corresponding expense amounts to determine the total cash working capital amount of \$43.6M for the Generation Revenue for the regulated hydroelectric business and \$19.2M for the Generation Revenue component for the nuclear business.

Chart 2a Cash Working Capital - Regulated Hydroelectric Generation Revenue 2024						
Line No.	Expense Category	Expense Amount (\$M)	Revenue Lag Days	Expense Lead Days	Net Lead/Lag Days	Cash Working Capital (\$M)
		(a)	(b)	(c)	(d) = (b) - (c)	(e) = (a) * (d)/365
	<u>OM&A Expenses:</u>					
1	Payroll & Payroll Withholdings	180.0	35.4	21.7	13.7	6.7
2	Active Benefits	19.8	35.4	18.7	16.7	0.9
3	Performance Incentives	5.4	35.4	262.7	(227.3)	(3.3)
4	Leases and Utilities	2.9	35.4	6.0	29.4	0.2
5	Miscellaneous OM&A	95.4	35.4	72.5	(37.1)	(9.7)
	<u>Centrally-held OM&A Expenses:</u>					
6	Pensions	27.6	35.4	10.3	25.1	1.9
7	OPEB	18.2	35.4	13.4	22.0	1.1
8	Insurance	14.3	35.4	(166.7)	202.1	7.9
9	Total OM&A Expenses	363.6				5.7
	<u>Other Costs:</u>					
10	Cost of Power (GRC, Water Rentals)	348.6	35.4	8.2	27.2	26.0
11	Income Taxes	(3.3)	35.4	18.7	16.7	(0.2)
12	Interest	173.2	35.4	10.1	25.3	12.0
13	Total Other Costs	518.5				37.8
14	Cash Working Capital - Hydroelectric					43.6

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Chart 2b Cash Working Capital - Nuclear Generation Revenue - OPG 2024						
Line No.	Expense Category	Expense Amount (\$M)	Revenue Lag Days	Expense Lead Days	Net Lead/Lag Days	Cash Working Capital (\$M)
		(a)	(b)	(c)	(d) = (b) - (c)	(e) = (a) * (d)/365
	<u>OM&A Expenses:</u>					
1	Payroll & Payroll Withholdings	1,163.7	35.5	21.7	13.7	43.7
2	Active Benefits	130.6	35.5	18.7	16.8	6.0
3	Performance Incentives	35.2	35.5	262.7	(227.3)	(21.9)
4	Leases and Utilities	20.8	35.5	6.0	29.5	1.7
5	Miscellaneous OM&A	611.7	35.5	72.5	(37.0)	(62.0)
	<u>Centrally-held OM&A Expenses:</u>					
6	Pensions	161.7	35.5	10.3	25.1	11.1
7	OPEB	106.6	35.5	13.4	22.0	6.4
8	Insurance	34.2	35.5	(166.7)	202.1	19.0
9	Total OM&A Expenses	2,264.6				4.0
	<u>Other Costs:</u>					
10	Property Taxes	14.6	35.5	(6.1)	41.6	1.7
11	Income Taxes	(59.9)	35.5	18.7	16.8	(2.8)
12	Interest	235.2	35.5	10.1	25.4	16.4
13	Total Other Costs	189.9				15.3
14	Cash Working Capital - OPG Nuclear					19.2

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4.0 HARMONIZED SALES TAX

OPG pays HST to suppliers for the purchase of goods and services and remits HST that is collected on revenue to the government. The Navigant Study analyzed the time between the date OPG collects HST on generation revenues from the IESO and the time it remits it to the government ("HST lead"), as well as the time between the date OPG pays HST to suppliers and the time it receives an input tax credit from the government ("HST lag"). The Navigant Study determined that the HST lead is 43.29 days and the HST lag is 46.21 days for the regulated hydroelectric business, and 43.21 days and 40.48 days, respectively, for the nuclear business.

The HST lead days are applied to \$220.6M (representing HST collected on generation revenues in 2024) and the HST lag days are applied to \$14.3M (representing estimated HST paid on expenses in 2024) to determine the total cash working capital amount of (\$24.4M) for the HST component for the regulated hydroelectric business. Similarly, the HST lead days are applied to \$430.6M (representing HST collected on generation revenues in 2024) and the HST lag days are applied to \$84.0M (representing estimated HST paid on expenses in 2024) to determine the total cash working capital amount of (\$41.7M) for the HST component for the nuclear business. The HST cash working capital components are shown in Chart 3 below:

Chart 3 Cash Working Capital - HST (\$M) 2024			
Line No.	Item	Regulated Hydroelectric	Nuclear
		(a)	(b)
1	Generation Revenue	(26.2)	(51.0)
2	HST Payments	1.8	9.3
3	Total	(24.4)	(41.7)

Further details on HST are provided in Ex. F4-2-1, Section 5.0.