

CASH WORKING CAPITAL

1.0 PURPOSE AND OVERVIEW

This evidence presents OPG's methodology for calculating cash working capital. Application of this cash working capital methodology produces a forecast of annual cash working capital in the 2017 to 2021 period for the nuclear facilities of \$11.0M, as shown in Chart 1.

Line No.	Item	Nuclear
		(a)
1	Generation Revenue	37.7
2	Other Revenue	0.4
3	HST	(27.1)
4	Total	11.0

OPG continues to rely on its existing lead/lag methodology as the basis of the cash working capital calculation given that: 1) the OEB accepted OPG's cash working capital calculation in the previous three hearings; 2) the amount of cash working capital remains very small relative to the overall size of rate base; 3) OPG's two main lead/lag day drivers (revenue from electricity generation and labour costs) are relatively stable; and 4) the OEB's existing filing guidelines (EB-2011-0286) did not contemplate a new lead/lag study. OPG has adopted the approach used in EB-2013-0321 and EB-2010-0008 by applying the net lag days provided in its EB-2007-0905 evidence to 2015 actual revenues and expenses.

2.0 METHODOLOGY

OPG's prescribed nuclear assets earn revenues from generation sales and other revenues. OPG has applied the net lag days provided in EB-2007-0905 to revenue and expense

1 categories using financial results for OPG's prescribed nuclear assets.¹ For 2013 to 2015,
2 actual financial results are used to determine the nuclear cash working capital for each of
3 those years. The cash working capital amount determined for 2015 is included in rate base
4 for the bridge and test years, as the 2015 calculation was the last assessment performed
5 prior to the filing of evidence in this proceeding.

6
7 As in EB-2013-0321, EB-2010-0008 and EB-2007-0905, in addition to the working capital
8 calculations for generation sales and other revenues, cash working capital requirements
9 related to commodity taxes (i.e., HST) are calculated separately and are included as a
10 component of cash working capital.

11

12 **3.0 GENERATION SALES**

13 The largest component of revenue for the prescribed assets is generation sales, which
14 consist of electricity sales and the provision of ancillary services to the IESO. The revenue
15 lag associated with generation sales and the associated expense leads, as described in EB-
16 2007-0905, and detailed cash working capital calculations for 2015 are provided in Chart 2
17 for nuclear generation.

¹ As in previous proceedings, expense categories are listed separately in the calculations of total cash working capital if the expense amount is greater than \$2M. Categories below \$2M are aggregated in the "All other cash expenses" line in Charts 2 and 3. Therefore, the number of expense lead days presented for the "All other cash expenses" line may differ from those shown in EB-2013-0321, EB-2010-0008 and EB-2007-0905 to the extent categories below \$2M vary from prior years.

Chart 2 Cash Working Capital - Nuclear Generation 2015						
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	Labour (incl. Overtime)	1,256.0	35.7	20.9	14.8	50.9
2	EPSCA Labour (incl. Overtime)	10.7	35.7	12.0	23.7	0.7
3	Consultants - Nuclear (i.e. Managed Task Services)	283.6	35.7	71.3	(35.6)	(27.7)
4	Consultants - Corporate (i.e. Managed Task Services)	44.6	35.7	40.4	(4.7)	(0.6)
5	Computer Equipment	2.8	35.7	30.0	5.7	0.0
6	Computer Software and Licences	11.9	35.7	(23.1)	58.8	1.9
7	Augmented Staff - Nuclear	33.2	35.7	44.4	(8.7)	(0.8)
8	Augmented Staff - Corporate	5.0	35.7	61.4	(25.7)	(0.4)
9	Outside Services - Corporate	65.9	35.7	6.2	29.5	5.3
10	Telecommunications	7.7	35.7	54.5	(18.8)	(0.4)
11	Facilities	8.2	35.7	0.0	35.7	0.8
12	Operating Licences	35.6	35.7	2.8	32.9	3.2
13	Utilities - Corporate	13.1	35.7	61.3	(25.6)	(0.9)
13	Membership fees	4.6	35.7	(77.9)	113.6	1.4
14	Transport Work Equipment	4.1	35.7	56.0	(20.3)	(0.2)
15	Travel & Accommodation	4.3	35.7	46.0	(10.3)	(0.1)
16	All other cash expenses	18.9	35.7	33.7	2.0	0.1
	<u>Centrally-held OM&A Expenses:</u>					
17	Pension and OPEB Costs	103.4	35.7	17.1	18.6	5.3
18	Performance Incentives	17.1	35.7	240.0	(204.3)	(9.6)
19	ONFA Guarantee Fee	7.8	35.7	(151.5)	187.2	4.0
20	Fiscal Calendar Adjustment	3.5	35.7	20.9	14.8	0.1
21	Insurance	12.7	35.7	(103.7)	139.4	4.9
22	Total OM&A Expenses					38.1
	<u>Other Costs:</u>					
23	Property Taxes	15.1	35.7	1.9	33.8	1.4
24	Income Taxes	(31.8)	35.7	15.1	20.6	(1.8)
25	Total Other Costs					(0.4)
1	26	Cash Working Capital - Nuclear				37.7

4.0 OTHER REVENUE

Other nuclear revenue consists of isotope and heavy water sales described in Ex. G2-1-1.²

The lead/lag days used to derive the cash working capital in EB-2013-0321, EB-2010-0008 and EB-2007-0905 have been applied to the appropriate 2015 expenses. Chart 3 summarizes the results.

² Consistent with the OEB's Decision in EB-2010-0008 that 50% of heavy water sales and related direct costs is to be included as an offset to the nuclear revenue requirement, 50% of OPG's heavy water revenue and direct costs are included in the 2015 cash working capital calculations.

Chart 3 Cash Working Capital - Other Revenue 2015						
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
1	Labour	3.2	58.1	20.9	37.2	0.3
2	All other cash expenses	2.8	58.1	49.1	9.0	0.1
3	Total Cash Working Capital					0.4

5.0 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 HST lag is the time between the HST payment date (to the supplier or to the government) and the date the government either refunds the HST to OPG or when OPG receives the input tax credit. OPG also collects HST from the IESO before making the remittance.

The 2015 HST cash working capital is calculated as shown in Chart 4 for the nuclear business:

Chart 4 Cash Working Capital - HST (\$M) 2015		
Line No.	Item	Nuclear
		(a)
1	Generation Revenue	(43.2)
2	Other Revenue	1.8
3	HST Payments - Regulated	14.3
4	Total	(27.1)

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