

UNDERTAKING J12.1

Undertaking

To calculate the revenue requirement impact of the application of what is called Method 3 in J1.3 Addendum.

Response

OPG has revised Exhibit K7.1 to include calculation of the revenue requirement impact of:

- Method 3 from J1.3 Addendum; and
- Method 3(b) as defined by Mr. Rupert (see transcript Vol. 12 pg 61 line 5).
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The calculations are presented in Attachment 1.

In J1.3 Addendum, Ms. McShane comments on the validity of Method 3. OPG has requested Ms. McShane's comments on the validity of Method 3(b). Her comments are attached (Attachment 2).

ATTACHMENT 1

Comparison of Treatment of Nuclear Liability Costs

The table below presents a comparison of OPG's proposed rate base approach per Ex. H1-T1-S3, to the "flow-through" approach from interrogatory L-2-58, to Option 2 from the CIBC report (L-2-10 Attachment 1), to Method 3, per addendum to J1.3, and to Method 3 (b), (per Mr. W. Rupert). Some of the methods would likely require a change in capital structure, however the numbers below only reflect OPG's proposed capital structure. The calculations below ignore tax impacts. These tax impacts would have to be considered if an alternative methodology was adopted.

Rate Base Approach \$ Millions	<u>2008</u> (9 months)	<u>2009</u>	Test Period
Revenue requirement from H1-T1-S3 pg. 2	310.0	393.6	703.6
"Flow-through" Treatment from L-2-58 \$ Millions	<u>2008</u> (9 months)	<u>2009</u>	Test Period
Exclude asset retirement costs from rate base *	(148.0)	(186.3)	(334.3)
Include accretion cost	450.7	624.0	1074.7
Less: segregated fund earnings	(362.2)	(525.9)	(888.1)
Decrease in Revenue Requirement	(59.5)	(88.1)	(147.6)
Total Revenue Requirement	250.5	305.5	556.0
Option 2 from CIBC (L-2-10 Attach 1) \$ Millions	<u>2008</u> (9 months)	<u>2009</u>	Test Period
Average unfunded nuclear liability**	1231	878	
Exclude unfunded nuclear liability from rate base return *	(78.3)	(75.1)	(153.4)
Include accretion cost	450.7	624.0	1074.7
Less: segregated fund earnings	(362.2)	(525.9)	(888.1)
Increase in Revenue Requirement	10.1	23.0	33.2
Total Revenue Requirement	320.1	416.6	736.8

*includes similar treatment for Bruce assets

**based on liability and fund values per 2007 financial statements projected forward to the test period. The liability projection is provided in L-1-83 and fund value projection is consistent with the fund earnings forecast in L-2-58.

Method 3, per addendum to J1.3	<u>2008</u>	<u>2009</u>	Test
\$ Millions	(9 months)		Period
Remove from capital structure amount of debt provision equal to the level of average unfunded nuclear liability at a cost of 5.65% in 2008 and 6.47% in 2009*	(52.2)	(56.8)	(109.0)
Include in capital structure an amount equal to the level of the average unfunded nuclear liability at a cost equal to the weighted average accretion rate of 5.6% in both years.	51.7	49.2	100.9
Decrease in Revenue Requirement	(0.5)	(7.6)	(8.1)
Total Revenue Requirement	309.5	386.0	695.5
Method 3 (b), per Mr. Rupert	<u>2008</u>	<u>2009</u>	Test
\$ Millions	(9 months)		Period
Remove from the capital structure an amount of debt provision equal to 42.5% of the level of average unfunded nuclear liability at a cost of 5.65% in 2008 and 6.47% in 2009*	(22.2)	(24.1)	(46.3)
Remove from the capital structure an amount of equity equal to 57.5 % of the level of average unfunded nuclear liability at a cost of 10.5% in both years*	(55.7)	(53.0)	(108.7)
Total removed from capital structure	(77.9)	(77.1)	(155.0)
Include in capital structure an amount equal to the level of the average unfunded nuclear liability at a cost equal to the weighted average accretion rate of 5.6% in both years.	51.7	49.2	100.9
Decrease in Revenue Requirement	(26.2)	(27.9)	(54.1)
Total Revenue Requirement	283.8	365.7	649.5

*includes similar treatment for Bruce assets

**based on liability and fund values per 2007 financial statements projected forward to the test period.
 The liability projection is provided in L-1-83 and fund value projection is consistent with the fund earnings forecast in L-2-58

ATTACHMENT 2

Ms. McShane's Comments on Method 3(b)

Under the preferred rate base method, the deemed capital structure is comprised of 57.5% equity and 42.5% debt. Under Method 3, the deemed capital structure remains at 57.5% equity and 42.5% debt. The principal difference between the two methods is that, under Method 3, the Unfunded Nuclear Liabilities become a source of debt financing and are costed at the weighted average accretion rate rather than at the cost of new long-term debt.

Method 3(b) as per Mr. Rupert however alters the proportions of debt and equity deemed to be financing rate base. Under Method 3(b), the assumption is that the Unfunded Nuclear Liabilities are first assigned to the rate base as a form of debt financing, and then the remainder of the financing required to equate rate base and capital structure is deemed to be 57.5% equity and 42.5% debt. Thus, under Method 3(b), the effective capital structure would be more heavily debt weighted than was the intention in the development of Ms. McShane's proposed capital structure and benchmark ROE. As a result, either the deemed common equity ratio underpinning the rate base net of the Unfunded Nuclear Liabilities would have to be increased or the ROE applied to the effective equity ratio inclusive of the Unfunded Nuclear Liabilities would have to be increased in order for the same level of compensation for risk to be achieved as proposed under the Rate Base Method. To illustrate, in 2009, Method 3(b) would decrease the effective equity ratio from 57.5% to approximately 50.5%. The decrease in the effective equity ratio would increase the required ROE by approximately 65 basis points to 11.15%. The impact on the required ROE (or deemed capital structure underpinning the rate base net of the Unfunded Nuclear Liabilities) would change from year to year depending on the forecast amount of the Unfunded Nuclear Liabilities and the impact on the effective deemed capital structure .

Moreover, implementation of Method 3(b) could result in significant year to year volatility in the regulated capital structure and the resulting available cash flows, as the each

1 year's regulated capital structure would be dependent on the size of the Unfunded
2 Nuclear Liabilities, which in turn would be a function of changes in cost estimates,
3 contribution amounts and performance of the segregated funds. The increased volatility
4 in the available cash flows that would result from adoption of Method 3(b) would in and
5 of itself increase the risk to which OPG is exposed and increase the required ROE or
6 deemed common equity ratio. This would require additional analysis to determine the
7 size of the required increase.
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