

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B, as amended;

**AND IN THE MATTER OF** an application by Enbridge Gas Inc. pursuant to Section 36(1) of the *Ontario Energy Board Act, 1998*, S.O. 1998, for an order or orders approving its Demand Side Management Plan for 2022-2027.

**INTERROGATORIES OF THE**

**SCHOOL ENERGY COALITION**

**ON ENBRIDGE REPLY EVIDENCE**

**7.SEC.1.EGI Reply**

**[Ex. Reply, p. 10]** With respect to cost of capital, please:

- a) Confirm that, for ratemaking purposes, cost of capital also includes the tax impacts and gross-up associated with the equity component of capital.
- b) Confirm that, at a 26.5% tax rate, a 9% allowed equity return must be grossed up to 12.245% when recovered in rates, to account for taxes, and that at a 36% equity thickness, ROE adds 4.41% to WACC, not 3.24%.
- c) Recalculate the 5.8% cost of capital to include the gross-up associated with the tax impact of ROE, and provide a new Table 2.
- d) Confirm that Figure 2 does not include the tax impact of ROE.
- e) Recalculate the net present value taking into account these tax impacts, and show your calculations.

**7.SEC.2.EGI Reply**

**[Ex. Reply, p. 11]** With respect to the forecast cost of amortization, please:

- a) Confirm that the witness has not taken into account the timing difference between deductibility of operating expenses such as DSM spending, and the amortization for rate purposes over a multi-year period.
- b) Confirm that the timing difference provides a “tax shield” in which Enbridge has negative taxable income, and thus tax savings, in the first year, and then in subsequent years must take the entire amount recovered from rates (including any tax gross-up), less the debt interest component, into taxable income and pay tax on that amount.
- c) Confirm that the spreadsheet model set forth below, and attached in Excel format, correctly sets out the revenue requirement calculations of a ten year amortization with the tax timing taken into account. If not confirmed, please re-do the model to make it accurate.

Revenue Requirement from \$1 Million DSM Expenditure										
Amortization Period	10 years									
Interest Rate	4%									
Debt Thickness	64%									
Return on Equity	9%									
Equity Thickness	36%									
Tax Rate	26.50%									
Expenditure	\$1,000,000									
Total Collected	\$1,348,408									
Year	1	2	3	4	5	6	7	8	9	10
Opening balance	\$1,000,000	\$900,000	\$800,000	\$700,000	\$600,000	\$500,000	\$400,000	\$300,000	\$200,000	\$100,000
Amortization	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Closing balance	\$900,000	\$800,000	\$700,000	\$600,000	\$500,000	\$400,000	\$300,000	\$200,000	\$100,000	\$0
Average Rate Base	\$950,000	\$850,000	\$750,000	\$650,000	\$550,000	\$450,000	\$350,000	\$250,000	\$150,000	\$50,000
Interest Cost	\$24,320	\$21,760	\$19,200	\$16,640	\$14,080	\$11,520	\$8,960	\$6,400	\$3,840	\$1,280
Return on Equity	\$30,780	\$27,540	\$24,300	\$21,060	\$17,820	\$14,580	\$11,340	\$8,100	\$4,860	\$1,620
Pre-tax Cost of Capital	\$55,100	\$49,300	\$43,500	\$37,700	\$31,900	\$26,100	\$20,300	\$14,500	\$8,700	\$2,900
Taxable income										
Expenditure	-\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest	-\$24,320	-\$21,760	-\$19,200	-\$16,640	-\$14,080	-\$11,520	-\$8,960	-\$6,400	-\$3,840	-\$1,280
Collected in rates	\$155,100	\$149,300	\$143,500	\$137,700	\$131,900	\$126,100	\$120,300	\$114,500	\$108,700	\$102,900
Total tax. Income	-\$869,220	\$127,540	\$124,300	\$121,060	\$117,820	\$114,580	\$111,340	\$108,100	\$104,860	\$101,620
Tax payable	-\$230,343	\$33,798	\$32,940	\$32,081	\$31,222	\$30,364	\$29,505	\$28,647	\$27,788	\$26,929
Revenue Requirement										
Amortization	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Cost of capital	\$55,100	\$49,300	\$43,500	\$37,700	\$31,900	\$26,100	\$20,300	\$14,500	\$8,700	\$2,900
Tax Grossup	-\$313,392	\$45,984	\$44,816	\$43,647	\$42,479	\$41,311	\$40,143	\$38,975	\$37,807	\$36,639
Total	-\$158,292	\$195,284	\$188,316	\$181,347	\$174,379	\$167,411	\$160,443	\$153,475	\$146,507	\$139,539

### **7.SEC.3.EGI Reply**

**[Ex. Reply, p. 12]** Please re-do Figures 3 to 6 taking into account the tax impacts, and provide a live Excel version of the results.

### **7.SEC.4.EGI Reply**

**[Ex. Reply, p. 12]** Please explain why the witness assumes 3% real growth for the first five years, and no real growth after that. If that is a recommendation of the witness, please provide the basis of that recommendation. If it is not, please re-do Figures 3 to 6, including the tax impacts, and assuming the continuation of Enbridge's proposed 3% real growth.

### **7.SEC.5.EGI Reply**

**[Ex. Reply, p. 19 et. seq.]** Please confirm that, in the witness's experience, the primary benefit of amortization of DSM current expenditures is lower near term revenue requirements, offset by higher revenue requirements in later years. Please explain how, where a DSM plan has consistent or rising real spending, amortization matches the annual costs of DSM in rates to the annual benefits of DSM, and avoids intergenerational equity. Please discuss how choice of amortization period would impact intergenerational equity.

### **7.SEC.6.EGI Reply**

**[Ex. Reply, p. 23-24]** Please confirm the witness's view that amortization of DSM current

expenditures is best undertaken as part of a program to increase DSM spending over time. Please discuss the advantages and disadvantages of using amortization for this purpose.

#### **7.SEC.7.EGI Reply**

**[Ex. Reply, p. 25]** Please discuss the advantages and disadvantages of amortizing incentive payments to customers (i.e. investments in their efficiency measures) and expensing all other program costs, in a manner similar to the distinction between capital and operating costs for the traditional pipes business.

#### **7.SEC.8.EGI Reply**

**[Ex. Reply, p. 31]** Please provide the witness's view on whether it would be appropriate for the OEB, or any regulator, to reduce or eliminate the collection of amortized costs of DSM in rates, including requiring those costs to be stranded and a shareholder responsibility, if future evaluation and measurement of DSM results demonstrates that the actual DSM benefits were materially less than claimed at the time the programs were implemented. Please specifically comment on the extent, if any, to which it is appropriate for the utility delivering the DSM program to bear some or all of the risk for the forecast results to actually occur.

#### **7.SEC.9.EGI Reply**

**[Ex. Reply, p. 31]** Please provide the witness's view on whether the increasing balance of unamortized DSM costs could result in customers, already responding to increasing costs of carbon and other cost pressures associated with natural gas use, to be more likely to cease use of natural gas to avoid any future obligation to pay for unamortized capital, including unamortized DSM (i.e. the so-called "death spiral").

#### **7.SEC.10.EGI Reply**

**[Ex. Reply, p. 31]** Please discuss whether one of the effects of amortizing DSM expenditures is to lock in continuation of DSM programs, since the result of terminating those programs is to require customers to bear in rates costs for past programs with no new benefits.

#### **8.SEC.11.EGI Reply**

**[Ex. Reply, p. 10, 28]** Please confirm that the OEB does not allow Enbridge to charge any profit margin based on DSM expenditures, but does provide a separate incentive mechanism allowing profit incentives that are based on performance but are unrelated to amounts expended.

#### **8.SEC.12.EGI Reply**

**[Ex. Reply, p. 28]** Please explain the accounting rule that provides an earned incentive that is collected through regulator-sanctioned amortization is not recognized as income in the year earned, just as any other receivable.

### **8.SEC.13.EGI Reply**

**[Ex. Reply, p. 30]** Please provide the basis on which the witness concludes that Enbridge is not obligated to deliver DSM programs, and they are thus “voluntary”. Please discuss the extent to which this conclusion has affected the other conclusions of the witness in the report.

### **8.SEC.14.EGI Reply**

**[Ex. Reply, p. 39]** Please confirm that the witness’s support of the 50% lower and 150% upper bounds includes an assumption that the risk and effort associated with achieving 50% is linearly the same as achieving 150% of target. Please provide evidence or analysis demonstrating that the risk and effort associated with achieving 150% of target is three times the risk and effort associated with achieving 50% of target. Please discuss the witness’s view of the alternate proposition, i.e. that as performance increases relative to target, generally speaking each increment of performance becomes more difficult to achieve.

### **8.SEC.15.EGI Reply**

**[Ex. Reply, p. 45]** Please explain the witness’s basis for characterizing the Net Benefit component as “a good faith response” to input during the Mid-Term Review.

### **8.SEC.16.EGI Reply**

**[Ex. Reply, p.47]** Please comment on Enbridge’s proposal to use gross savings for the GHG incentive rather than net savings.

### **8.SEC.17.EGI Reply**

**[Ex. Reply, p. 49]** Please comment on the appropriateness of capping shareholder incentives based on an empirically-determined measure of reduced natural gas consumption, for example normalized for weather, GDP, or other similar external factors. Please advise to what extent, if any, it is reasonable for the regulator (and through the regulator, the customers) to require top-down confirmation that natural gas use is declining as a result of customer-funded DSM programs.

### **8.SEC.18.EGI Reply**

**[Ex. Reply, p. 50]** Please explain why, if the shareholder incentive metric is shifted from lifecycle savings (the basis of the current program design) to annual savings, Enbridge will not be incented to redesign its program offerings to maximize annual savings, including at the expense of lifecycle savings. Please advise how the regulator should ensure that this type of redesign to the detriment of customers does not occur.

### **8.SEC.19.EGI Reply**

**[Ex. Reply, p. 51]** Please explain why the witness believes that adjusting baselines to fit the reasonable counterfactual presents an evaluation risk to Enbridge. Please explain why customers should compensate Enbridge for savings that assume the present situation will continue without change for decades into the future, or why customers should compensate Enbridge for savings calculated by Enbridge, rather than calculated by independent evaluators.

#### **8.SEC.20.EGI Reply**

**[Ex. Reply, p. 52]** Please provide the basis on which the witness claims that “annual savings are basically collinear with lifecycle savings and so also correlate well with long-term objectives like GHG reductions and net benefits”, including references to the academic literature if available. Please provide a numerical comparison of annual savings to TRC plus with respect to a representative measure, and provide all backup calculations in Excel format.

#### **8.SEC.21.EGI Reply**

**[Ex. Reply, p. 54]** Please advise whether the witness believes that the net-to-gross results are mostly within Enbridge’s control through program design. Please explain why ratepayers should bear entirely the risk that actual net to gross declines over the DSM plan.

#### **8.SEC.22.EGI Reply**

**[Ex. Reply, p. 56]** Please explain how the 15% would work if there is no annual target to meet before the 15% overspend can be accessed.

#### **8.SEC.23.EGI Reply**

**[Ex. Reply, p. 56]** Please provide a list of jurisdictions in which utilities are paid shareholder incentives based on their own unverified performance claims.

#### **8.SEC.24.EGI Reply**

**[Ex. Reply, Appendix A]** Please provide a list of consulting engagements of Fast Tracks related to regulated energy matters, in which Mr. Weaver was involved, from 2000 to 2017.