NUCLEAR WASTE MANAGEMENT AND DECOMMISSIONING -
REVENUE REQUIREMENT TREATMENT OF NUCLEAR LIABILITIES

1.0 PURPOSE
The purpose of this evidence is to describe the revenue requirement treatment of OPG's liabilities for decommissioning its nuclear stations (including the Bruce Generating Stations) and nuclear used fuel and low and intermediate level waste management (collectively, the “Nuclear Liabilities”).

2.0 REVENUE REQUIREMENT TREATMENT
Ontario Regulation 53/05 specifically requires that the OEB “ensure that Ontario Power Generation Inc. recovers the revenue requirement impact of its nuclear decommissioning liability arising from the current approved reference plan.” In the context of O. Reg. 53/05, “nuclear decommissioning liability” is defined as “the liability of Ontario Power Generation Inc. for decommissioning its nuclear generating facilities and the management of its nuclear waste and nuclear fuel.” An “approved reference plan” is defined as a “reference plan, as defined in the Ontario Nuclear Funds Agreement, which has been approved by Her Majesty the Queen in the right of Ontario in accordance with that agreement.”

Ontario Regulation 53/05 also requires that OPG establish a deferral account allowing for recovery of the revenue requirement impact of any change in its nuclear decommissioning liability arising from an approved reference plan approved after April 1, 2005. Evidence on this deferral account is presented in Ex. J1-T1-S1.

As described in Ex. H1-T1-S1, OPG’s financial statements recognize Nuclear Liabilities, which represent the present value of committed costs based on the lifecycle cost of decommissioning and nuclear waste management programs. Committed costs include the fixed cost components of each program as well as the lifetime variable costs for waste already generated. Under Generally Accepted Accounting Principles, upon the initial recognition of the liabilities, the present value of the committed costs is recorded in the related nuclear fixed assets. The fixed assets costs are depreciated over the useful lives.
The recovery of costs associated with the Nuclear Liabilities is achieved through the following inclusions in the revenue requirement based on OPG's financial statements.

1. Depreciation Expense: OPG includes nuclear depreciation expense (presented in Ex. F3-T2-S1) in the revenue requirement, and the expense related to the committed costs is included therein.

2. Return on Rate Base: OPG includes its total nuclear fixed asset balance (presented in Ex. B1-T1-S1) in the rate base. As described above, the fixed asset balance includes a component related to the Nuclear Liabilities. Therefore, the return on rate base computed as part of the revenue requirement includes an amount related to the Nuclear Liabilities.

3. Fuel Expense: The present value of the variable costs related to incremental quantities of used fuel generated in each period is recovered as a portion of OPG's nuclear fuel expense, as presented in Ex. F2-T5-S1 Table 1. The difference between the lifecycle estimate and the amount of committed costs relating to used fuel included in the Nuclear Liabilities balance represents the variable costs of future fuel waste. Using a present value basis, these variable costs are divided by the number of future fuel bundles to calculate the $/bundle rate. Used fuel expenses are then calculated by applying the $/bundle rate to the actual (or forecast, as appropriate) used fuel generated. Each bundle is charged an equal amount in present value terms.

4. Low Level and Intermediate Level Waste Expense (recorded in depreciation expense for financial reporting purposes): The present value of the variable costs related to incremental volumes of low level and intermediate level nuclear waste produced in each period is recovered as a portion of OPG's depreciation expense, as per Ex. F3-T2-S1. The difference between the lifecycle estimate and the amount of committed costs included in the Nuclear Liabilities balance represents the variable costs of future waste. Using a present value basis, these variable costs are divided by the low level and intermediate level radioactive waste volume estimates to calculate the $/m³ rate. Low
level and intermediate level radioactive waste expenses are then calculated by applying the $/m^3 rate to the waste volumes generated.

The recovery of costs associated with the Nuclear Liabilities for Bruce Generating Stations through the revenue requirement occurs in an equivalent manner. Depreciation expense, return on equity and deemed interest, used fuel storage and management expense, and low level and intermediate level waste expense (recorded in depreciation) related to the Bruce Generating Stations are presented in Ex. G2-T2-S1.