LONG-TERM DEBT METHODOLOGY

1.0 PURPOSE
This evidence provides an explanation of the methodology used to determine the long-term debt and associated cost for OPG’s regulated operations.

2.0 OVERVIEW
The long-term debt supporting OPG’s regulated operations is comprised of existing/planned long-term debt issues plus a long-term debt provision required to reconcile OPG’s regulated debt to the capital structure recommendations of Foster Associates, Inc. (“Fosters”) provided in Ex. C2-T1-S1.

OPG’s existing/planned long-term debt is comprised of project-related and general corporate issues. OPG has entered into financial derivatives associated with many existing and planned new issues to reduce its exposure to interest rate fluctuations. The methodology used by OPG to determine the regulated portion of existing and planned new debt issues is discussed in section 3, while the cost of these issues is discussed in section 4. OPG’s other long-term debt provision is described in section 5.

3.0 EXISTING AND PLANNED NEW DEBT ISSUES

3.1 Project-Related Long-Term Debt Issues
OPG assigns all existing and planned project-related financing to regulated or unregulated operations based on whether the project is related to the prescribed assets in O. Reg. 53/05. For example, project-related financing associated with nuclear projects, or hydroelectric projects at R.H. Saunders or facilities that comprise the Niagara Plant Group, is assigned to OPG’s regulated operations. All project-related financing that is not associated with OPG’s prescribed assets is assigned to unregulated operations. OPG also forecasts its financing requirements for projects that are still in the design/assessment phase; however these financing requirements are not assigned to OPG’s regulated operations until and unless they are specifically identified as a project in OPG’s capital budget for its regulated operations. Actual project-related financing will only occur with respect to defined projects, which will
then be directly assigned to regulated or unregulated operations based on whether the project is related to the prescribed assets in O. Reg. 53/05.

3.2 Corporate Long-Term Debt Issues

The existing/planned corporate long-term debt portfolio remaining after project-related financing has been directly assigned must be allocated to regulated and unregulated operations. Consideration of the appropriate allocation methodology begins with the general ratemaking principle that the term of the debt should be assumed to be similar to the life of the assets that are supported by that debt. This principle was endorsed by the OEB in its Report of the Board on Cost of Capital\(^1\) (OEB’s Cost of Capital Report). Consistent with this principle, OPG has used the book value of its net fixed assets (gross fixed assets, less accumulated depreciation plus construction work in progress) as the basis for allocating existing long-term debt. OPG determined the ratio of regulated net fixed assets at December 31, 2007 (as reflected in Exhibit B) to the total net fixed assets reflected in OPG’s 2007 audited financial statements. OPG has used audited balances as this approach is consistent with O. Reg. 53/05, the asset values are readily available, the amounts are independently verified, and the ratio is not expected to change substantially in the short-term as indicated in Ex. C1-T1-S2 Table 1.

The net fixed asset values determined above were adjusted to remove asset values that were financed pursuant to project specific arrangements. The adjusted relative net fixed asset ratio was then applied to OPG’s unassigned debt to determine the amount of existing debt to be included in the long-term debt component of OPG’s proposed capital structure for its regulated assets.

For forecasting purposes, OPG has applied the allocation ratio determined using OPG’s 2007 audited financial statement balances to planned debt issues that have not been directly assigned to regulated or unregulated operations as described above. OPG has chosen to use 2007 data to determine the allocation factor used to determine the amount of long-term

\(^1\) Report of the Board on Cost of Capital and 2\(^{nd}\) Generation Incentive Regulation for Ontario’s Electricity Distributors, Issued December 20, 2006 pursuant to EB-2006-0088 (Cost of Capital), EB-2006-0089 (2\(^{nd}\) Generation Incentive Regulation Mechanism), and EB 2006-0087 Licence Amendment proceedings, page 10.
debt for OPG’s regulated operations for 2008, and 2009 as it is simple, does not require assumptions of corporate net fixed asset growth, and the ratio of regulated net fixed assets to corporate net fixed assets does not change significantly from year to year\(^2\). Any year-over-year difference is temporary as the ratio is updated annually as discussed below.

OPG’s reporting of historic year information will be based on the information reflected in OPG’s most recent audited financial statements to determine the actual debt issued and net fixed asset ratio applicable to corporate debt issued after December 31, 2007. OPG’s 2008 and 2009 corporate debt has been allocated to regulated operations based on this allocation ratio.

### 3.3 Risk Management Activities

OPG’s Risk Oversight Committee (“ROC”) is a senior management committee that has been delegated the authority to review and approve financial and operational risk mitigation strategies for the Corporation. Commencing in 2005, OPG was exposed to interest rate risk as a result of the financing arrangements with the Ontario Electric Financing Corporation for new debt issuances. As described in Ex. C1-T2-S2 the Ontario Electric Financing Corporation is OPG’s primary source of existing and planned long-term debt issues. The ROC approved interest rate risk management strategies for corporate and project-related debt to mitigate OPG’s exposure to interest rate fluctuations. The ROC approved hedging up to 75 percent of the total planned cash expenditures (net of contingencies) for the Niagara Tunnel project, and up to 50 percent of the Ontario Electric Financing Corporation debt maturing in the second half of 2007 and all of 2008. This hedging strategy allows OPG to lock-in the interest rate for a portion of the debt issued. The risk management strategies approved by the ROC required transactions to be completed over a number of months with a number of AA-rated banks and that the execution of such hedging transactions must be in compliance with Generally Accepted Accounting Principles.

OPG entered into hedging transactions associated with planned project-related debt issues for OPG’s prescribed assets (the Niagara Tunnel project), and for corporate debt issues

\(^2\) The differences between 2005, 2006 and 2007 are less than two percent per Ex. C1-T1-S2 Table 1.
related to future maturities. The hedges were entered into with a number of AA-rated banks, in accordance with the hedge percentages and total face value amounts reflected in the strategies approved by the ROC.

The primary benefit of the interest rate hedging activity is that it locks in the interest cost on the hedged portion of the debt thereby reducing the exposure to interest rate volatility risk and refinancing risk on corporate debt. OPG’s interest rate exposure is especially significant at this time because of the refinancing risk due to the compressed maturity schedule. More than 50 percent of OPG’s debt portfolio is due within four years and the average duration of this debt portfolio is less than four years, as described in Ex. C1-T2-S2.

The financial impact of the hedge transactions that have matured is amortized over the life of the underlying debt issue for accounting purposes (i.e., in accordance with Generally Accepted Accounting Principles) and ratemaking purposes, and is reflected in the effective interest rate cost of the debt issue.

4.0 COST OF EXISTING AND PLANNED NEW DEBT ISSUES

4.1 Existing Debt Issues

OPG’s debt continuity schedules provided in Ex. C1-T2-S2 reflect the actual cost of debt issues on or before December 31, 2007. OPG’s effective debt cost includes the cost of OPG’s hedging activities; therefore the cost of each interest rate hedge transaction is allocated consistent with the assignment or allocation of the debt issue underlying the hedge transaction.

4.2 Planned New Debt Issues

OPG’s forecast cost of long-term debt (prior to hedging) is between 5.48 percent and 6.58 percent for all project specific financing assigned to regulated operations, refinancing of new and maturing corporate issues, and other long-term debt provisions necessary to reconcile the debt component of OPG’s regulated capital structure with the proposed rate base that the financing supports. The long-term interest rate forecast for the 10-year Government of Canada bonds, as published in December 2007 by Global Insight, a third party independent
market source, was used to forecast OPG’s long-term debt cost. Global Insight has forecast quarterly interest rates of 4.18, 4.26, 4.36 and 4.74 percent in quarters 1 to 4 respectively for 2008, and 4.98, 5.17, 5.25 and 5.28 percent in quarters 1 to 4 respectively for 2009. The mid-point of the range of credit margins applicable to OPG’s actual debt issues during the 2005 and 2006 historical period was approximately 80 basis points. An OPG credit margin of 130 basis points has been added for 2008 and 2009 to reflect the results of OPG’s December 21, 2007 issue. The market has continued to evolve from one characterized by an abundance of capital being made available at low credit spreads to one where corporate borrowers are seeing upward pressure on credit spreads as investors re-price credit risk and reduce capital. This upward pressure on OPG’s corporate risk premium is expected to continue throughout the test period.

OPG’s effective debt cost includes the cost of OPG’s hedging activities; therefore the cost of each interest rate hedge transaction is allocated consistent with the assignment or allocation of the debt issue underlying the hedge transaction.

5.0 **OPG'S OTHER LONG-TERM DEBT**

As discussed above, OPG finances long-term assets with long-term financing. OPG has used a provision for long-term debt to reconcile the debt component of OPG’s regulated capital structure with the proposed rate base that financing supports. OPG’s other long-term debt provision is determined based on the difference between the debt resulting from the application of OPG’s proposed capital structure to its proposed regulated rate base, and the project-related and corporate long-term debt assigned or allocated to OPG’s regulated operations (as discussed above) plus the portion of short-term debt allocated to regulated operations as described in Ex. C1-T1-S3.

The average unhedged interest rate of new and refinanced debt issued each year for both corporate and project-related borrowing purposes is used to determine the interest rate attributable to the other long-term debt provision.