OTHER OPERATING COST ITEMS

1.0 PURPOSE
The purpose of this evidence is to present OPG’s other operating cost items. Other operating costs include depreciation expense, income tax, capital tax, commodity tax, and property tax.

2.0 OVERVIEW
Exhibit F3-T2-S1 Tables below present other operating expenses for the prescribed facilities, which are considered separately below.

3.0 DEPRECIATION EXPENSE
Once a constructed or purchased asset is classified as in-service, the related capital expenditures are recorded in an appropriate asset class with an established service life. Capital project expenditures are recorded as fixed assets in the construction in progress account until they are classified as in-service, and are not depreciated. Each asset is assigned a unique asset number.

Approximately 90 percent of OPG’s in-service fixed assets are directly associated with specific generation facilities. The net book value of the nuclear and Bruce assets includes costs relating to OPG’s fixed asset removal and nuclear waste management liability, as discussed in Ex. H1-T1-S2.

The remaining in-service fixed assets are either directly associated with a business unit, or are held centrally and are used by both regulated and unregulated generation business units. The assets held centrally are not allocated to prescribed facilities; instead the business units (both regulated and unregulated) are charged a service fee for the use of these assets. This charge is reported as an OM&A cost. The explanation of the service fee methodology is provided in Ex. F3-T3-S1.

Depreciation of an asset commences once it is declared to be in-service. OPG uses the group depreciation method where each class of assets is depreciated at an established rate.
This method is typically used by regulated utilities in Ontario. Under this method, ordinarily when an asset within a class is retired, the gross asset value is removed from both the cost of the asset and the related accumulated depreciation. An exception to this treatment is applied if an asset is retired significantly in advance of the end of the life of its asset class, in which case the remaining net book value is charged to depreciation.

The assumption underlying the group depreciation method is that assets retired in the normal course are fully depreciated. In the asset group, some assets are retired before the end of their estimated service life, while others are retired after the end of their estimated service lives. Consequently, on average, the entire asset class is assumed to be fully depreciated at retirement.

The depreciation expense also includes expenses relating to nuclear low-level and intermediate-level waste management, as discussed in Ex. H1-T1-S2. Further, any asset removal costs incurred as a result of replacing existing equipment that have not been previously provided for are included in depreciation expense in the period of removal. Removal costs include costs associated with disassembling a component of an asset to gain access to a subcomponent to be repaired or replaced and the cost to reinstall the removed component.

It should be noted that depreciation expense amounts presented in tables accompanying this exhibit, as well as tables accompanying Ex. F3-T2-S2, do not include amortization amounts related to OPG’s variance and deferral accounts. Historical and proposed amortization/recovery amounts are presented and discussed in Exhibit J.

Depreciation rates for the various classes of in-service fixed assets are based on their estimated service lives. Service lives are established by the technical and engineering personnel of the business unit that manage the fixed assets. The business units rely primarily on technical assessments based on their operating experience. Fixed assets are depreciated on a straight-line basis except for computers and transport and work equipment, which are depreciated on a declining balance basis due to the nature of these assets. The service life...
of an asset class is limited by the service life of the station(s) to which it relates. The following provides a summary of the average service lives and depreciation rates of the fixed assets of OPG’s regulated business, which are used to determine the depreciation expense for OPG’s proposed test period revenue requirement:

<table>
<thead>
<tr>
<th>Description</th>
<th>Service Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear generating stations and major components</td>
<td>15 to 49 years</td>
</tr>
<tr>
<td>Hydroelectric generating stations and major components</td>
<td>25 to 100 years</td>
</tr>
<tr>
<td>Administration and service facilities</td>
<td>10 to 50 years</td>
</tr>
<tr>
<td>Computers, and transport and work equipment assets – declining balance</td>
<td>9% to 40% per year</td>
</tr>
<tr>
<td>Major application software</td>
<td>5 years</td>
</tr>
<tr>
<td>Service equipment</td>
<td>5 to 10 years</td>
</tr>
</tbody>
</table>

¹ Excludes the Bruce Generating Stations

The depreciation expense associated with the Bruce facilities is presented separately in Ex. G2-T2-S1.

As part of its due diligence on the service lives of fixed assets and ultimately the calculation of depreciation expense, OPG convenes an internal Depreciation Review Committee (“DRC”). The DRC is accountable for providing a formal engineering, technical, and financial review of fixed asset service lives. The DRC conducts a review of the service lives of generating stations and a selection of asset classes every year, with the objective of reviewing all significant asset classes over a five-year cycle.

The DRC is comprised of representatives from each of the business units with operational expertise as well as staff from finance and regulatory affairs functions. The engineering and technical review of the service lives is based on a variety of sources (depending on the asset class or facility in question), including operational experience of the business units, lifecycle planning and condition assessment data for major facilities, as well as benchmarking data (where available). In addition to the engineering and technical review of the fixed assets, the DRC is also accountable for assessing the impact of other external factors on station service lives, such as the impact of government policy or legislation. The Committee’s scope and recommendations are submitted for approval to the Chief Operating Officer, Chief Financial
Officer, Executive Vice Presidents of Nuclear, Hydroelectric, and Fossil business units and the Senior Vice President, Corporate Affairs (the “Approvals Committee”) for approval. Approved DRC recommendations on depreciation are implemented on January 1 of the year following the year of review unless otherwise required.

The focus of the 2007 DRC review was the overall life of each station. This review was to be completed by assessing the service lives of the asset classes that have a significant impact on each station’s end of life date, as well as other factors that may affect station lives. These significant asset classes are referred to as the “life limiting components”.

The 2007 DRC recommended extensions to the estimated service lives of the Bruce A and B Generating Stations to 2014 from 2012 and to 2035 from 2030, respectively. These changes have been incorporated into OPG’s proposed revenue requirement and for accounting purposes effective January 1, 2008. The extension of the Bruce A service life was based on information contained in the Ontario Power Authority’s 2007 Integrated Power System Plan and Bruce Power L.P.’s public announcement in August 2007 of its intention to refurbish Unit 4 of the station. The extension of the Bruce B service life was similarly based on data from the Integrated Power System Plan and OPG’s earlier technical knowledge of the state of life-limiting components of the station. The 2007 DRC also recommended the extension of the estimated service life of the Darlington Generating Station to 2019 from 2017 based on an engineering assessment of the expected lives of pressure tubes at the station and planned capability factors. The extensions to the lives of the Bruce A, Bruce B and Darlington Generating Stations decreases OPG’s annual depreciation expense by approximately $8M for Bruce A, $7M for Bruce B and $18M for Darlington.

The 2007 DRC concluded that the current estimated service lives of regulated hydroelectric stations are appropriate based on a technical assessment of their dams, which are the relevant life limiting components. The recommendations of the 2007 DRC were accepted by the Approvals Committee. A copy of the 2007 Depreciation Review Committee report is provided in Appendix B.
Previously, in 2006, the DRC recommended the extension of the estimated service life of the Bruce B Generating Station to 2012 from 2010, which was implemented for accounting purposes effective January 1, 2007. The DRC recommended the life extension based on then-current discussion papers released by the Ontario Power Authority relating to the integrated power system plan. This change decreased OPG’s depreciation expense related to the Bruce facilities by approximately $14M/year. The impact of other recommendations by the 2006 DRC on depreciation expense associated with regulated operations was not material. A redacted copy of the 2006 Depreciation Review Committee report is provided in Appendix A. OPG has redacted information with respect to OPG’s unregulated fossil operations. The report was approved by OPG’s business unit leaders and the Chief Financial Officer.

Prior to the DRC convening in 2006, the estimated service life of the Pickering B Generating Station was extended to 2014 from 2009 effective January 1, 2006, following an engineering assessment of the major components of the station and taking into account recent station capacity factors. This change resulted in an annual decrease in depreciation expense of approximately $36M. OPG also extended the life of Pickering A Unit 4 to 2021 from 2017 in the fourth quarter in 2005, following the return to service of Pickering A Unit 1. The extension was largely based on the fact that Pickering A would be operating as a two-unit station following the return to service of the refurbished Unit 1 and the decision by OPG’s Board of Directors not to proceed with the planned refurbishments of Units 2 and 3. The impact of this change was a decrease in depreciation expense of approximately $16M annually.

In anticipation of regulation by the OEB, OPG retained Gannett Fleming Inc. (“Gannett Fleming”), an external consultant with in-depth experience in the area of depreciation for rate regulation purposes, to review the adequacy of OPG’s depreciation review process based on the 2006 DRC process. See Exhibit F4-T2-S1 for a copy of the full report. In its report, Gannett Fleming concluded that the “processes, procedures and methods used by the DRC as part of OPG’s Depreciation Review Process are sufficient to address generally accepted depreciation objectives for rate regulated companies. Additionally, OPG’s current practices should result in a reasonable determination of average service lives and a reasonable and appropriate
amount of depreciation expense to be included in OPG’s revenue requirement request.” (Part I, page 2)

In assessing OPG’s depreciation review process, Gannett Fleming developed a set of six generally accepted regulatory objectives related to depreciation. These objectives are based on their experience with North American utilities and consist of: effectiveness, efficiency, transparency and understandability, intergenerational equity, capital attraction, and independence from bias. Based on a review of OPG’s policies and procedures related to depreciation, a review of working papers supporting service life estimates, and interviews with OPG staff involved in depreciation accounting and estimating service lives, Gannett Fleming concluded that OPG’s processes meet the required regulatory objectives. As part of this engagement, OPG also requested that Gannett Fleming provide recommendations for improvements. Recommendations were provided in the following two areas: (1) independence from bias and (2) transparency and understandability. OPG has addressed aspects of these recommendations in the 2007 DRC process, as explained below, and will address the remaining recommendations as part of the 2008 DRC process.

Gannett Fleming noted that they did not observe any bias in OPG’s existing process. However, in order to eliminate any potential perception of bias in a regulatory forum, Gannett Fleming recommended that OPG implement a Depreciation Approvals Committee or a similar internal governance structure that would oversee and approve the work of the DRC. Essentially, such a structure already exists within OPG, as the DRC’s recommendations are approved by the heads of each OPG business unit. In order to fully address this recommendation, in 2007 OPG expanded the role of the heads of the business units from approving the service life estimates developed by the DRC to also approving the process and methods that are used by the DRC to select assets for review and to assess their service life indicators. As well, starting in 2007, the business unit leaders have become responsible for formally nominating representatives from their business units to the DRC. This expanded role incorporates Gannett Fleming’s recommendations relating to approving asset selection criteria and providing direction to the DRC regarding the type of work that should be performed to estimate service lives.
Gannett Fleming also recommended increased use of benchmarking of certain asset service lives as an additional means of ensuring the impartiality of the DRC process. In 2008, OPG will consider benchmarking the service lives of its hydroelectric assets and certain components of its nuclear facilities for which meaningful comparison data can be obtained.

The second recommendation relates to transparency and understandability of the DRC report in a regulatory forum. The 2006 DRC report that Gannett Fleming reviewed focused on documenting the results of the DRC and provided limited information on asset selection criteria or depreciation policies and procedures. In order to address Gannett Fleming’s recommendation in this area, OPG intends to document the asset selection criteria in its subsequent DRC reports in greater detail and has also documented relevant depreciation policies and procedures as part of this exhibit.

### 4.0 REGULATORY INCOME TAXES

#### General Requirements

Under the *Electricity Act, 1998*, OPG is required to make payments in lieu of corporate income and capital taxes to the Ontario Electricity Financial Corporation and to file federal and provincial income tax returns with the Ontario Ministry of Finance. The tax payments are calculated in accordance with the *Income Tax Act* (Canada) and the *Corporations Tax Act* (Ontario), and are modified by the *Electricity Act, 1998* and related regulations. This effectively results in OPG paying taxes similar to what would be imposed under federal and Ontario tax legislation.

#### Accounting Methodology

Prior to rate regulation, OPG utilized the liability method of accounting for income taxes and recorded both current and future income tax expense in accordance with Generally Accepted Accounting Principles. When OPG became subject to rate regulation on April 1, 2005, the taxes payable method of accounting for income taxes was adopted for the regulated operations in accordance with Generally Accepted Accounting Principles. This method was adopted because it is the method approved by the OEB for determining the tax allowance in
the rates for regulated gas utilities and is specified in the Electricity Distributors Rate
Handbook. Under the taxes payable method of accounting for income tax, only the current
tax expense is recorded in the financial statements; future taxes are not recorded to the
extent that they are recovered or refunded through regulated payment amounts.

In late 2007, the Canadian Institute of Chartered Accountants introduced certain changes to
Generally Accepted Accounting Principles that will be effective on January 1, 2009. These
changes will require all rate regulated entities to use the liability method of accounting for
income taxes and, therefore, record future tax expense in the financial statements. In
accordance with these changes to Generally Accepted Accounting Principles, OPG expects
to record a regulatory asset or liability for the amount of future income taxes expected to be
recovered or refunded through regulated payment amounts. Consistent with the use of the
taxes payable method approved by the OEB for other regulated utilities (as noted above),
OPG has not incorporated future tax expense into its revenue requirement.

Regulatory Income Taxes – Current Tax Expense
For purposes of establishing regulated payment amounts, OPG seeks recovery of current
income tax expense only. The regulatory income taxes are determined by applying the
statutory tax rate to regulatory taxable income of the combined nuclear and regulated
hydroelectric operations as well as taxable income associated with the Bruce facilities. These
income taxes are then allocated to nuclear (including the Bruce facilities) and regulated
hydroelectric operations based on each business’s regulatory taxable income. This approach
reduces the total taxes included in the revenue requirement because if there is a tax loss in
one regulated business unit, it reduces the tax expense in the other regulated business unit.

Regulatory taxable income is computed by making adjustments to the regulatory earnings
before tax for items with different accounting and tax treatment, applying the same principles
as used for the calculation of actual income taxes under applicable legislation as well as
regulatory principles. The most significant adjustments, as detailed in the calculation of
taxable income/loss for the period 2005 - 2009 in Tables 7 and 8 accompanying this exhibit,
are as follows:
1. Depreciation/Capital Cost Allowance—Accounting depreciation expense is not deductible for tax purposes, however tax depreciation (i.e., capital cost allowance) is deductible. The capital cost allowance deduction for 2005 and subsequent years has been reduced to reflect the impact of adjustments resulting from an ongoing income tax audit of OPG by the Provincial Tax Auditors (the “Tax Auditors”).

2. Nuclear Waste Management Expenses—OPG is responsible for decommissioning its nuclear stations and nuclear used fuel and low-level and intermediate-level waste management (collectively, the “Nuclear Liabilities”) as described in Ex. H1-T1-S1. Expenses accrued relating to this obligation are not deductible for tax purposes.

3. Cash Expenditures for Nuclear Waste and Decommissioning—Cash expenditures incurred and charged against the Nuclear Liabilities are deductible for tax purposes.

4. Segregated Fund Contributions and Receipts—OPG is required under the Ontario Nuclear Fuel Act to make contributions to segregated funds to enable it to meet its obligations for the Nuclear Liabilities, as described in Ex. H1-T1-S1. The Electricity Act, 1998 allows OPG a tax deduction when the contributions are made. When OPG receives monies from the funds for reimbursement of eligible expenditures, the amount received is taxable.

5. Adjustment Related to Duplicate Interest Deduction—This adjustment removes a portion of interest related to OPG’s Nuclear Liabilities since this interest is included in both OPG’s tax deduction for segregated nuclear fund contributions and the tax deduction associated with the deemed interest expenses financing OPG’s rate base. The adjustment is determined based on the debt ratio and cost of debt from Ex. C1-T2-S1, and an assessment of the portion of OPG’s rate base related to the Nuclear Liabilities.

6. Pension/Other Post-Employment Benefits—Pension and other post-employment benefits expenses recorded by OPG for accounting purposes (as discussed in Ex. F3-S4-T1) are not deductible for tax purposes. However, cash contributions to the registered pension plan, as well as OPEB and the supplementary pension plan payments are deductible for tax purposes.

7. Regulatory Assets and Liabilities—Certain expenditures recorded by OPG as regulatory assets for accounting purposes are considered to be operating expenses for tax
purposes and can be deducted in the year incurred. These expenses are recovered from ratepayers in future test periods in accordance with the direction provided by the OEB and the benefit of the tax deduction is recognized in the year these expenses are recovered (and recorded as amortization expense for accounting purposes). For instance, tax deductible costs incurred to increase the output of, refurbish or add operating capacity to a generation facility are recorded as a regulatory asset for accounting purposes and are not deducted as an operating expense as part of the calculation of the regulatory taxable income during the historical and bridge periods. Amounts recorded in the Nuclear Development Deferral Account and the Capacity Refurbishment Variance Account will be deducted for regulatory taxable income purposes during the test period based on the recovery amount/methodology approved by the OEB.

As an exception to the above principle, Pickering A return to service ("PARTS") expenses recorded by OPG as a regulatory asset in the PARTS deferral account described in Ex. J1-T1-S1 were deducted as an operating expense in the calculation of the regulatory taxable income in the year the expenses were actually incurred. Therefore, the amortization of the PARTS regulatory asset is added back for the purposes of calculating the regulatory taxable income, as the ratepayers will receive the tax benefit associated with these deferred costs through the application of the tax loss carry forward balance (discussed below) during the test period.


9. Other – This category includes various miscellaneous tax adjustments such as the accrual for materials obsolescence, capital items that are expensed for accounting purposes, and meals and entertainment expenses that are subject to the 50 percent tax deduction limitation.

10. One Time Adjustments – Costs representing the impairment of inventory and construction in progress assets in 2005 as a result of OPG’s decision not to proceed with
the return to service of Pickering A Units 2 and 3 were not recovered from the ratepayers. Consequently, the related amount deductible by OPG for tax purposes is added back in order to calculate the regulatory taxable income in 2005.

The regulatory taxable income calculation for the years 2005 - 2007 results in tax losses for those years, as shown in Ex. F3-T2-S1 Tables 7, 8 and 9. The actual cumulative tax losses at the end of 2007 that are available to be carried forward are $990.2M. These tax losses were generated mainly due to OPG's contributions to segregated funds, which are deductible for tax purposes under the *Electricity Act, 1998* and regulations there-under. OPG made annual contributions of $454M in 2005 - 2007 as well as a one-time additional payment of $334M in 2007 in accordance with the Ontario Nuclear Funds Agreement. This one-time payment was previously forecast to occur in the first quarter of 2008. (Refer to Ex. G2-T2-S1 for further detail on this payment.) In 2005, the $258M in PARTS expenses recorded as a regulatory asset were also deducted for tax purposes, as allowed under the *Income Tax Act* (Canada) contributing to a tax loss in that year. In 2007, OPG's negative earnings before taxes contributed to the tax loss in that year. OPG has forecasted higher regulatory earnings before tax for the test period and, accordingly, taxable income of $163.0M and $324.0M in 2008 and 2009, respectively. Table 9 accompanying this exhibit presents a continuity schedule of OPG's regulatory taxable income/losses.

Since OPG became subject to regulation on April 1, 2005, the annual regulatory tax loss for 2005 calculated as $364.4M in Ex. F3-T2-S1 Table 8 should be adjusted to remove the portion of the loss attributable to the period prior to regulation. The adjustment is based on a straight-line pro-rataion with the exception of the loss resulting from the PARTS deferred costs deduction. The ratepayers receive the benefit of the full PARTS deferred costs deduction as O. Reg. 53/05 requires OPG to recover the full amount of these costs. The amount of the adjustment is a reduction to the loss of $28.4M, as reflected in Ex. F3-T2-S1 Table 9.

Typically, if a net tax loss arises in a particular year, it is carried forward to reduce regulatory taxable income in future years. OPG has applied its projected total cumulative tax losses at the end of 2007 to reduce the projected regulatory taxable income in 2008 and 2009 of
$163.0M and $324.0M, respectively, to nil. In this application, the projected tax losses are also used to mitigate the customer bill impact of OPG’s payment amount and deferral/variance account recovery proposals. This mitigation proposal is described in Exhibit K.

**Income Tax Audit**

OPG is currently being audited by the Tax Auditors for the 1999 taxation year. In 2006 and 2008, OPG received preliminary communications from the Tax Auditors with respect to their initial findings from their audit of OPG’s 1999 taxation year. Many of the issues raised through the audit are unique to OPG and relate either to start-up matters and positions taken on April 1, 1999 upon commencement of OPG’s operations, or matters that were not addressed through the *Electricity Act, 1998*. Although OPG has resolved some of these issues, there is uncertainty as to the resolution of the remaining issues. OPG expects to receive a reassessment for its 1999 taxation year. Although this reassessment would relate to the 1999 taxation year, the potential impact of the reassessment could be to materially increase income taxes for the 2005 - 2009 period and subsequent years, and therefore reduce tax losses.

**Regulatory Income Taxes – Large Corporations Tax**

OPG was subject to the large corporations tax until it was eliminated by the federal government effective 2006. For the historical year 2005, large corporations tax was calculated by applying the applicable rate to the rate base in excess of the full large corporations tax exemption. The full exemption was attributed to regulated operations as part of the calculation, consistent with the determination of regulatory income taxes on a stand-alone basis. The calculation of large corporations tax presented in Tables 3 and 6 accompanying this exhibit includes an amount related to the Bruce facilities.

**Ontario Corporate Minimum Tax**

Ontario corporate minimum tax (“OCMT”) is designed to impose a minimum tax based on financial statement income calculated without most tax adjustments. The OCMT paid in a year can be applied to reduce taxes payable in future years. The OCMT rate is substantially
lower than the general Ontario corporate tax rate and is only payable when there are little or no Ontario taxes payable. Generally, OCMT is calculated as four percent of accounting income less 12 percent of taxable income. To the extent OPG forecasts a tax loss for a particular test year, OPG determines an OCMT amount for its regulated operations. OPG expects that it will be able to apply OCMT determined for its regulated operations to reduce regulatory income taxes in the near future. To mitigate the customer impact of OPG’s proposed revenue requirement and to provide a measure of payment stability, OPG does not propose to recover OCMT in its revenue requirement. OPG notes that excluding OCMT from the revenue requirement is consistent with the guidance provided by the OEB in the Electricity Distributors Rate Handbook.

5.0 ONTARIO CAPITAL TAX

OPG is subject to the Ontario capital tax at the applicable rate on its taxable capital subject to the general capital tax deduction. For regulatory purposes, the rate base in excess of the general capital tax deduction is used as a proxy for the taxable capital used as the base for calculating Ontario capital tax. The full capital tax deduction was attributed to regulated operations, consistent with the determination of regulatory income taxes on a stand-alone basis. The applicable Ontario capital tax rates are scheduled to decrease from 0.300 percent to 0.225 percent in 2007, 2008 and 2009. The amount of Ontario capital tax included in the revenue requirement may therefore vary year-over-year as a result of changes in rate base and applicable rates. The Ontario capital tax is currently scheduled to be eliminated effective July 1, 2010.

The calculation of Ontario capital tax associated with nuclear and regulated hydroelectric business units is presented in Tables 2 and 5 accompanying this exhibit, respectively. Ontario capital tax associated with the Bruce facilities is presented separately in Ex. G2-T2-S1.

6.0 COMMODITY TAX

Goods purchased by OPG are subject to the eight percent retail sales tax (provincial sales tax) levied under the Retail Sales Tax Act (Ontario), except for purchases of machinery and
equipment used directly in the generation of electricity which are exempt under section 7 (1) (40) of the Act. Provincial sales tax is also payable on certain information technology services, printing and parking, and OPG is required to self assess the tax and remit it. Provincial sales tax forms part of the expenditure of the underlying item (OM&A, capital, inventory, etc.) except for the self-assessment amounts which are primarily recorded as a centrally-held cost, as discussed in Ex. F3-T1-S1.

OPG is subject to the five percent goods and services tax levied under Part IX of the Excise Tax Act (Canada) on all goods and services purchased. While the goods and services tax is recoverable by claiming input tax credits on returns filed monthly, goods and services tax is included in the cash working capital component of the rate base, as noted in the Lead/Lag Study in Ex. B4-T1-S1.

Where applicable, OPG pays duty under the Customs Act (Canada) on goods imported into Canada; however, currently most of these imports are either exempt or have duty free status through the North American Free Trade Agreement. For supply and installation contracts, the contractor’s price includes duty, if applicable, on the goods imported to perform the work. Any duty paid forms part of the expenditure on the underlying item (OM&A, capital, inventory, etc.).

7.0 PROPERTY TAX
OPG is responsible for both the payment of municipal property taxes and a payment in lieu of property tax to the Province of Ontario. The total of these two property tax payments is intended to represent what a commercial generating company would pay as property tax on OPG’s assets based on full current value assessment, and represents OPG’s property tax expense.

Municipal Property Taxes
Municipal property taxes are regulated under the *Assessment Act, 1990* and are levied on OPG owned generation lands and buildings. For certain generating assets the *Act* prescribes the basis for assessment of the municipal property taxes. Municipal property taxes are made to about 100 municipalities each year by OPG. This rate application presents municipal property taxes for prescribed nuclear and hydroelectric lands and buildings owned and operated by OPG.

The Municipal Property Assessment Corporation issues notices of assessments annually, which are reviewed by OPG staff for accurate valuation and tax classification issues. Any incorrect classes and under/overvaluations are appealed through the Assessment Review Board.

OPG pays municipal property tax related to certain properties, which are not directly associated with specific generation business units and are held centrally. These properties primarily include OPG’s Head Office and certain other properties located in the vicinity of Toronto, Ontario. Regulated generation business units are charged a service fee for the use of assets that are centrally held. Municipal property taxes incurred by OPG for the centrally held properties form part of that fee as discussed in Ex. F3-T3-S1.

**Payment in Lieu of Property Tax**

Payment in lieu of property tax is regulated through O. Reg. 224/00 under the *Electricity Act, 1998* and is paid to the Province of Ontario through the Ontario Electricity Financial Corporation. According to O. Reg. 224/00 the payment in lieu of property tax represents taxes based on the difference between current value assessment and the prescribed municipal assessment for certain generating assets.

The assessment basis under O. Reg. 224/00 has not been updated since 1999. Consequently, the current value assessment amounts used for payment in lieu calculations and the payments in lieu amounts themselves are out of date. The Province has indicated that they intend at some point to update the assessment values in O. Reg. 224/00 and make
it retroactive to 1999. This would result in retroactive increases in the payments in lieu of property tax for OPG.

Property Taxes on Nuclear and Bruce Assets

For property assessment/taxation purposes, nuclear generating stations (including Bruce facilities) lands contain buildings that are classified as “generating” (e.g., buildings that are used in, or auxiliary to, the generating process, such as power house, water treatment plant, pump houses, etc) and “non-generating” (e.g., administration/office buildings). Municipal property tax payments to municipalities are paid based on a statutory assessment rate of $86.11 per square meter, per the Assessment Act, 1990 for “generating” buildings, and at current value assessment, which is the valuation method used for other property owners in the province, for “non-generating” buildings. For “generating” buildings, OPG is also subject to making payments in lieu of property tax, as described above, based on the difference between current value assessment and the prescribed municipal assessment rate of $86.11 per square meter.

In establishing its budgets for the historical and bridge years OPG assumed that the update to O. Reg. 224/00 will occur in the budget year, resulting in the budgeting of higher payments in lieu than have actually occurred. The budgets for the test period (2008 and 2009) for nuclear generation stations (including Bruce facilities) do not assume that the regulation will be updated during the test period. OPG proposes to record the financial impact of property tax changes for OPG’s regulated facilities resulting from an update to O. Reg. 224/00 or related regulations in its proposed Changes in Tax Rates, Rules, and Assessments variance account as described in Ex. J1-T3-S1. Property taxes associated with the Bruce facilities are presented in separately Ex. G2-T2-S1.

Property Taxes on Hydroelectric Assets

OPG does not make payments in lieu of property tax on hydroelectric facility stations, dams and upstream/downstream properties; instead, OPG pays a gross revenue charge under section 92.1 of the Electricity Act, 1998. Refer to Ex. F1-T4-S1 for discussion of the gross revenue charge. For those hydroelectric properties that are not associated with a generating
station or dam site, OPG pays municipal property tax under the Assessment Act, 1990 at current value assessment. For the prescribed hydroelectric facilities, municipal property taxes are only payable for its district office at DeCew. DeCew municipal property taxes are approximately $19,000/year.
LIST OF ATTACHMENTS

1

2

3 Appendix A: 2006 Depreciation Review Committee Recommendations

4 Appendix B: 2007 Depreciation Review Committee Recommendations

5
DEPRECIATION REVIEW COMMITTEE RECOMMENDATIONS

December 2006
Depreciation Review Committee Recommendations
EXECUTIVE SUMMARY

In 2006, the Depreciation Review Committee (DRC) was mandated to assess asset service lives and quantify the financial impacts of any proposed changes.

Scope of Review:

1. The DRC makes recommendations with respect to estimated service lives for major fixed assets. The recommendations in this report have been reviewed and endorsed by Senior Management having custody of the assets. The recommendations contained herein are proposed for implementation on January 1, 2007, except as noted.

2. The 2006 DRC selected asset classes which covered approximately $4.2 billion or 42 percent of the total net book value of OPG’s major fixed assets as at February 1, 2006.

<table>
<thead>
<tr>
<th>Summary of DRC Asset Coverage</th>
<th>Net Book Value M$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>1,200</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>2,800</td>
</tr>
<tr>
<td>Fossil</td>
<td>-</td>
</tr>
<tr>
<td>Corporate – Administration and Service Communications</td>
<td>200</td>
</tr>
<tr>
<td>Subtotal</td>
<td>4,200</td>
</tr>
<tr>
<td>Less: Asset Classes Deferred to Next DRC Review</td>
<td>(80)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,120</strong></td>
</tr>
</tbody>
</table>

3. The review of average service lives for major fixed assets is based mainly on operating experience and engineering judgment. This review resulted in no change to average service lives, except as noted below.

4. The depreciation service life of the Darlington generating station remains at 25 years.

5. Bruce B service life has been extended by 2 years to 2012.

6. Recent developments with respect to the service lives of OPG’s nuclear and fossil stations have resulted in changes to depreciation service lives and are documented below and included in this report.

7. A review of minor fixed assets was not performed at this time but will be considered for the next review cycle.

Developments Occurring Outside the DRC Process:

**Nuclear:**
The service lives of the nuclear stations were established on April 1, 1999 based on the known predicted life limiting component at each plant. The predicted service lives resulted in establishing the depreciation life at Pickering B and Darlington units at 25 years and Pickering A at 40 years. Pickering A extended life was primarily a result of replacement of the pressure tubes on all four units in the early 1990’s.

As a result of the work to return Pickering A to service and assessment work on the condition of Pickering B units, changes to the service lives of these stations were approved by senior management. The DRC convened after these decisions were approved and the changes are documented in this report. The changes made to the service lives of the nuclear stations are as follows:

- Pickering A Unit 4 was refurbished and returned to service in 2003. The depreciation service life was extended to 2017, effective January 1, 2004, based on the assumption of the unit running as a one unit station. With the completion of the return to service of Unit 1 in November 2005, the service lives of the two units at Pickering A were revised to 2021. The impact for 2006 was an increase in depreciation of $6M. This is made up of an increase in depreciation of $22M from the in service of Pickering A Unit 1,
offset by a decrease in depreciation of $16M from the life extension of Pickering A Unit 4 from 2017 to 2021.

- Based on a recent assessment at of the condition of the major components at Pickering B the service life was extended to 2014 for depreciation purposes effective January 1, 2006. The depreciation impact of this change is a decrease of $37M annually.

**Fossil:**
The service lives of the coal-fired plants, of 2007 and 2008, for first half of 2006 was based on announcements by the Province to shut down all coal-fired plants by the end of 2008. Recent announcements have resulted in a shift of these shut down dates during the time of the DRC review. Based on present schedules for nuclear refurbishments and present capacity additions to the Ontario market that are under construction or can be assumed to be highly certain, and utilizing the revised load forecast of the ISO and revised hydroelectric production numbers, it is OPG's view that the additions to the market will facilitate the retirement of OPG's existing coal facilities in the 2011-2012 timeframe. As such, OPG senior management has established 2012 as a revised end of life date for all coal-fired plants and has extended the service lives to that date for depreciation purposes. The extension will reduce annual depreciation by $126M in 2007.

### Summary of Station Life Changes Occurring Outside the DRC Process

<table>
<thead>
<tr>
<th>Stations</th>
<th>Service Life at April 1, 1999</th>
<th>Effective Date of Depreciation Change</th>
<th>Revised Average End of Life (December)</th>
<th>Estimated Annual Impacts $M increase/(decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickering A Unit 1</td>
<td>Dec 2012</td>
<td>Nov 2005*</td>
<td>2021</td>
<td>22</td>
</tr>
<tr>
<td>Pickering A Unit 4</td>
<td>Dec 2012</td>
<td>Jan 2004**</td>
<td>2017</td>
<td>(20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nov 2005**</td>
<td>2021</td>
<td>(16)</td>
</tr>
<tr>
<td>Pickering B</td>
<td>Sept 2009</td>
<td>Jan 2006***</td>
<td>2014</td>
<td>(37)</td>
</tr>
<tr>
<td>Coal-fired Generating Stations</td>
<td>See Table 3.2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* From 1999 until November 2005, Pickering A Unit 1 was out of service
** From 1999 until October 2003, Pickering A Unit 4 was out of service
*** September

### 2006 DRC Recommendations:

**Nuclear Facilities**
- Bruce B service life has been extended by 2 years to 2012.
- More in depth review of nuclear process systems asset class to be conducted in next DRC;
- More in depth review of major fixed asset classes that will last for the life of the plant, such as process systems, fuel channel assemblies, calandria tubes, moderator heat exchange, etc., to be conducted in the next DRC; and
- For asset classes relating to the Pickering plant with individual service lives less than the current service life of 2021, do not extend the service life to the current date. This recommendation is made on the basis of an immaterial dollar impact, and as such not making the change will save administrative time and effort.

**Hydroelectric Facilities**
- Service life for public safety booms asset class should be decreased to 15 years from 75 years. The dollar impact on depreciation expense is minimal.

**Corporate Administrative and Services Assets**
- On reviewing the service life of 700 University Avenue and administrative system software, no change in service life is required.
Recommendations for future DRC includes:

General
- Obtain input from line of business asset management and condition assessment groups through existing members of DRC;
- Investigate possibility of benchmarking of OPG’s DRC process against similar processes followed by other companies;
- Provide advance notice of future DRC schedule;
- Consider findings from depreciation process review performed by Gannett Fleming Inc; and
- Review minor fixed assets

Nuclear
- Review plant condition assessment reports and ensure recommendations are consistent;
- Review nuclear assets intended to last the life of the plant such as process systems, to assess if assumptions are still valid;
- Consider reassessment of Darlington; and

Hydroelectric
- Review specific asset class recommendations which relate to how these assets are organized in the fixed asset sub-ledger.
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<th>Page</th>
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<td>Average Service Lives of Hydroelectric Generating Stations</td>
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<td>3.3.2</td>
<td>Average Service Lives of Hydroelectric Generating Station Asset Classes</td>
<td>10</td>
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<td>3.4.1</td>
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</tr>
<tr>
<td></td>
<td>APPENDIX C – DRC 2006 ASSET CLASS SELECTIONS</td>
<td></td>
</tr>
</tbody>
</table>
1.0  INTRODUCTION

1.1  Work of the Depreciation Review Committee

The Depreciation Review Committee (DRC) is accountable for providing a formal engineering, technical and financial review of major and minor fixed asset service lives. The DRC periodically reviews the service lives of all major facilities and a selection of asset classes, with the objective of reviewing significant and new asset classes over a regular cycle.

In order to fulfill its objective of providing an engineering and technical review of the service lives of OPG fixed assets, it is important for the DRC to have representatives of the various lines of business who have good knowledge and expertise of the day to day operations of each of the various OPG plants. As such, senior management of each of the lines of business are consulted to ensure that the appropriate technical and engineering staff are selected for the DRC. In addition to the technical and engineering review of the fixed assets, the DRC is also accountable for assessing the financial impact of any changes to service lives that it recommends. This is particularly important in the area of depreciation expense and its impact on OPG’s corporate financial statements, as well as budgets and forecasts. As such, financial staff is required for the DRC, particularly those involved with the calculation and analysis of depreciation expense and those involved in the preparation and analysis of OPG’s financial statements, budgets and forecasts.

The 2006 DRC included representatives from Nuclear, Hydroelectric, and Corporate Functions who have custody of major fixed assets and understand and have experience related to how the assets are operated, as well as representatives from finance. In addition, since a portion of OPG’s business is now regulated, representatives from Regulatory Affairs and Regulatory Finance were on the 2006 DRC.

DRC recommendations are documented in the DRC report, which is reviewed by DRC representatives and receives the concurrence of Senior Management. The goal, functions and structure of the Committee are outlined in detail in Appendix A.

The Committee’s recommendations are submitted to the Chief Financial Officer for approval and implementation. Approved DRC recommendations are generally implemented on January 1st of the year following the year of review.

1.2  Scope of the Review for 2006

The Depreciation Review Committee’s deliberations for 2006 focused primarily on the review of the following:

• The DRC makes recommendations with respect to estimated service lives for major fixed assets. The recommendations in this report have been reviewed and endorsed by Senior Management having custody of the assets. The recommendations contained herein are proposed for implementation on January 1, 2007, except as noted.

• The 2006 DRC selected asset classes which covered approximately $4.2 billion or 42 percent of the total net book value of OPG’s major fixed assets as at February 1, 2006.

A summary of the DRC Asset Coverage is shown in the Table below.

<table>
<thead>
<tr>
<th>Net Book Value M$</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>1,200</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>2,800</td>
</tr>
<tr>
<td>Fossil</td>
<td>-</td>
</tr>
<tr>
<td>Corporate - Admin &amp; Service and Communications</td>
<td>200</td>
</tr>
<tr>
<td>Sub-total</td>
<td>4,200</td>
</tr>
<tr>
<td>Less: Asset Classes Deferred to Next DRC Review</td>
<td>(80)</td>
</tr>
<tr>
<td>Total</td>
<td>4,120</td>
</tr>
</tbody>
</table>

• The review of average service lives for all major fixed assets is based mainly on operating experience and engineering judgment. This review resulted in no change to average service lives, except as noted below;

• The depreciation service life of the Darlington generating station remains at 25 years;

• Bruce B service life has been extended to 2012. The two year extension was the result of discussion papers released by the Ontario Power Authority and is consistent with the assumptions used by Nuclear Waste Management Division in the estimate of the future costs of retiring Bruce B assets; and

• Recent developments with respect to the service lives of OPG’s nuclear and fossil stations have resulted in changes to depreciation service lives and are documented below and included in this report.
1.2.1 Developments Occurring Outside the DRC Process and Background Information

Nuclear:
The service lives of the nuclear stations were established on April 1, 1999 based on the known predicted life limiting component at each plant. The predicted service lives resulted in establishing the depreciation life at Pickering B and Darlington Units at 25 years and Pickering A at 40 years. Pickering A extended life was primarily a result of replacement of the pressure tubes on all four Units in the early 1990’s.

As a result of the work to return Pickering A to service and assessment work on the condition of Pickering B units, changes to the service lives of these stations were approved by senior management. The DRC convened after these decisions were approved. The changes made to the service lives of the nuclear stations are as follows:

- Pickering A Unit 4 was refurbished and returned to service in 2003. The depreciation service life was extended to 2017 based on the assumption of the unit running as a one unit station. With the completion of the return to service of unit 1 in November 2005, the service lives of the two units at Pickering A was revised to 2021. The impact for 2006 was an increase in depreciation of $6M. This is made up of an increase in depreciation of $22M from the in service of Pickering A Unit 1, offset by a decrease in depreciation of $16M from the life extension of Pickering A Unit 4 from 2017 to 2021;

- In 2006, nuclear senior management approved a change to the Pickering B station’s service life from 2009 to 2014, based on an assessment last year on the condition of major components. This is expected to reduce depreciation expense by approximately $37M per year;

- A reassessment of Darlington has not been completed as part of this DRC, and will be considered at a future date; and

Fossil:
The service lives of the coal-fired plants of 2007 and 2008 for first half of 2006 was based on the Province to shut down all coal-fired plants by the end of 2008. Recent announcements have resulted in a shift of these shut down dates during the time of the DRC review. Based on present schedules for nuclear refurbishments and present capacity additions to the Ontario market that are under construction or can be assumed to be highly certain, and utilizing the revised load forecast of the IESO and revised hydroelectric production numbers, it is OPG’s view that the additions to the market will facilitate the retirement of OPG’s existing coal facilities in the 2011-2012 timeframe. With all the uncertainty out there and the significant load growth we have seen in the past two years, end of 2012 for coal retirements would be an expected value.

A summary of the station life changes due to developments occurring outside the DRC process is shown in the Table below 1.2.1 below.

<table>
<thead>
<tr>
<th>Stations</th>
<th>Revised Average End of Life (December)</th>
<th>Estimated Annual Impacts $M increase/ (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickering A Unit 1</td>
<td>2021</td>
<td>22</td>
</tr>
<tr>
<td>Pickering A Unit 4</td>
<td>2021</td>
<td>(36)</td>
</tr>
<tr>
<td>Pickering B</td>
<td>2014*</td>
<td>(37)</td>
</tr>
<tr>
<td>Coal-fired Generating Stations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* September

1.3 Asset Class Selection Criteria

The DRC’s process for the selection of assets for service life review is as follows:

1. Corporate Accounting members of the DRC made an initial selection based on high dollar value asset classes and asset classes that have undergone changes in their business environment;

2. The initial asset selection by Corporate Accounting was reviewed by all DRC members at the first meeting;

3. Business unit members of the DRC were asked to identify additional selections based on their knowledge of plant operating experience;

4. The assets selected for review were finalized and approved by all members of the DRC based on the Corporate Accounting’s initial recommendations and input from business unit members; and

5. Not all components were covered from the classes selected. Some classes were noted for further assessment as part of future DRC.
1.3.1 Results of Initial Asset Class Selection

- The results of the initial asset class selection based on dollar value are summarized in Table 1.3.1 below.

### Table 1.3.1 Results of Initial Asset Class Selection

<table>
<thead>
<tr>
<th>Asset Class #</th>
<th>Asset Class Description</th>
<th>NBV $M</th>
<th>Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>15200</td>
<td>Buildings and Structures</td>
<td>376</td>
<td>50</td>
</tr>
<tr>
<td>15340</td>
<td>Process Systems</td>
<td>350</td>
<td>40</td>
</tr>
<tr>
<td>15450</td>
<td>Condenser Tubing Pickering</td>
<td>104</td>
<td>30</td>
</tr>
<tr>
<td>15600</td>
<td>Instrumentation and Control</td>
<td>301</td>
<td>30</td>
</tr>
<tr>
<td>10200</td>
<td>Substructures and Super-substructures</td>
<td>1,434</td>
<td>100</td>
</tr>
<tr>
<td>10301</td>
<td>Lining of Tunnels and Permanent Shafts</td>
<td>244</td>
<td>75</td>
</tr>
<tr>
<td>10318</td>
<td>Gates, Stoplogs and Operating Mechanisms</td>
<td>346</td>
<td>50</td>
</tr>
<tr>
<td>10501</td>
<td>Main Rotating Electrical Plant – Mach less Windings</td>
<td>256</td>
<td>75</td>
</tr>
<tr>
<td>16210</td>
<td>Permanent Buildings, Roads and Site Improvements</td>
<td>137</td>
<td>50</td>
</tr>
<tr>
<td>16560</td>
<td>Administrative System Software</td>
<td>84</td>
<td>5</td>
</tr>
</tbody>
</table>

- Two Corporate asset classes selected for review have undergone changes in their business environment. In September 2005, the super asset in asset class 16210 (700 University Ave. building), was transferred from a capital lease to OPG owned. Asset class 16560 (Systems software – Energy Markets) was selected because market structure changes have meant that OPG has substantially reduced its electricity trading business. As such, it was felt that the changed business circumstances surrounding both these asset classes, warranted DRC review.

- A review of minor fixed assets was not done at this time but will be considered for the next review cycle.

1.3.2 Results of Final Asset Class Selection

- The initial asset classes recommended by Corporate Accounting were accepted by the DRC.
- Nuclear members of the DRC did not recommend any additional asset classes for review.
- Hydroelectric members of the DRC recommended the additional asset classes for review which are summarized in Table 1.3.2 below.

### Table 1.3.2 Results of Additional Asset Class Selection

<table>
<thead>
<tr>
<th>Asset Class #</th>
<th>Asset Class Description</th>
<th>NBV $M</th>
<th>Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>10302</td>
<td>Spillways, Sluices, Flumes</td>
<td>95</td>
<td>75</td>
</tr>
<tr>
<td>10502</td>
<td>Bus, Switching and Power Cable</td>
<td>89</td>
<td>45</td>
</tr>
<tr>
<td>10503</td>
<td>High Voltage Switching</td>
<td>20</td>
<td>40</td>
</tr>
</tbody>
</table>

For a more detailed list of final asset selections which includes, net book values and service lives, see Appendix C.

2.0 FINANCIAL IMPACT ON DEPRECIATION EXPENSE

A change of $1M pertaining to Hydroelectric was recommended see section 3.3 for details.

3.0 RECOMMENDATIONS AND SUPPORTING RATIONALE

3.1 Nuclear Facilities

The DRC reviewed service lives assigned to various asset classes selected. Bruce B service life has been extended to 2012.

3.1.1 Average Service Lives of Nuclear Generating Stations

The previously assigned average service life to nuclear generating stations was 40 years Pickering A and 25 years for Bruce A & B, Pickering B, and Darlington, based on respective assumed capacity usage.

One of the major life limiting components is pressure tubes. Replacement of these components is taken into account in the determination of the service life.

The remaining service lives of OPG’s nuclear generating stations as of January 2006 are shown in Table 3.1.1.
Table 3.1.1
Remaining Service Lives for Nuclear Generating Stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Estimated Retirement Date (Dec. 31)</th>
<th>Remaining Service Life as at Jan. 1, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickering A Unit 1</td>
<td>2021</td>
<td>15</td>
</tr>
<tr>
<td>Pickering A Units 2 &amp; 3*</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Pickering A Unit 4</td>
<td>2021</td>
<td>15</td>
</tr>
<tr>
<td>Pickering B</td>
<td>2014</td>
<td>8</td>
</tr>
<tr>
<td>Darlington</td>
<td>2017</td>
<td>11</td>
</tr>
<tr>
<td>Bruce A**</td>
<td>2003</td>
<td>-</td>
</tr>
<tr>
<td>Bruce B**</td>
<td>2012</td>
<td>6</td>
</tr>
</tbody>
</table>

* Assets written off in 2005 as a result of the decision not to proceed with the refurbishment of the units.

** Assets are on lease to Bruce Power for 17 year term (commenced May 1, 2001) 11 years remaining in lease term.

3.1.2 Average Service Lives of Nuclear Generating Station Asset Classes (excl. Bruce)

The DRC reviewed four nuclear generating station asset classes (excluding Bruce) and no revisions to average service lives are recommended at this time.

As a result of feasibility studies being undertaken regarding the potential to refurbish and extend the life of Pickering B station, detailed plant condition assessments are being completed over the next two years. Nuclear generating station asset class lives will be revisited following the completion of the plant condition assessments.

15340 – Process Systems

This asset class (Nuclear process systems) is rather broad, encompasses a significant amount of varied systems, and represents the infrastructure inherent in a nuclear plant outside of the major life limiting components (i.e. pressure tubes / steam generators). The current 40 year life reflects the expectation that these process systems would be able to last for the extended ten years past original design capability.

The process systems are aging, but are expected to remain operational to the current end-of-life dates (EOL) predicted for Pickering A and B and Darlington. Detailed station condition assessments will be performed as part of the Pickering B Plant Life Extension Project (PLEP) to determine whether these assets can continue to operate for an additional 20 – 30 years past their current end of life (EOL) dates.

Recommendation:

Due to the large number of significant systems in this asset class, it is recommended that all components in this asset class be reviewed by the next DRC, before making a final service life recommendation.

3.2 Fossil Facilities

3.2.1 Average Service Lives of Fossil Generating Stations

The average service life assigned to Ontario Power Generation’s fossil generating stations is summarized in Table 3.2.1 and reflects the changes based on the recent announcements and forecast from the IESO.

The end station life for the coal-fired generating stations is 6 years from the end of 2006. The service life of Lennox remains at 40 years.

The remaining stations service lives of the OPG’s fossil generating stations as of January 2007 are shown in Table 3.2.1 below.

Table 3.2.1
Remaining Service Lives at Fossil Generating Stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Estimated Retirement Date July 1, 2006</th>
<th>Remaining Service Life as at Jan. 1, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Redacted]</td>
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</tbody>
</table>

3.3 Hydroelectric Facilities

OPG has 64 hydroelectric generating stations, and 238 associated dams. Implementation of the recommendations arising from this review will increase the annual charges to operations for Hydroelectric by $1M in the first year and approximately $500K annually thereafter.
3.3.1 Average Service Lives of Hydroelectric Generating Stations

The hydroelectric long life components which include the dams and civil structures for the hydroelectric facilities, were designed to last 50 and 100 years respectively. The April 1, 1999 revaluation of OPG’s assets reset the operating life assumption on these assets to 100 years. The revaluation also assigned approximately 80% of the hydroelectric fixed assets value has been assigned to dams and civil structures.

The hydroelectric medium life components, which include, the mechanical and electric systems, in the hydroelectric facilities, have been retained at their existing service life assumptions (30-40 years). The remaining lives of these assets as at April 1, 1999, are used as a basis to calculate depreciation expense. Senior management have reviewed and determined that the remaining lives of these assets are representative of their current useful and technical lives.

3.3.2 Average Service Lives of Hydroelectric Generating Station Asset Classes

The DRC reviewed the service lives assigned to selected hydroelectric asset classes. Based on the review, the DRC recommends retaining the average service lives of twelve asset classes and the splitting of asset class 10300 into two classes in order to separate public safety booms from spillways, sluices, and flumes.

The implementation of these recommendations will increase annual depreciation expense by $1M.

The rationale for the revision of the service life is:

1030200 – Spillways, Sluices, Flumes (Public Safety Booms only)

The previous service life review noted that these assets are all long-lived assets that are in place for long periods of time with only periodic maintenance. Only under extreme conditions, the conveyance systems are replaced or re-lined.

Given that these assets are subject to more extreme conditions due to water flow friction and abrasion, and damage due to debris in the conveyance structure, it is reasonable that they carry a service life less than power dams which currently have a service life of 100 years. The approach is consistent with other Canadian Utilities as previously surveyed by Hydro Quebec.

It is recommended that the asset class for public safety booms be split from the asset class for spillways, sluices and flumes and the public boom asset class be decreased to 15 years from 75 years.

3.4 Administrative and Service Facilities

3.4.1 Average Service Lives of Administrative and Service Facilities Asset Classes

The DRC reviewed the average service lives of two service facility components. Based on various benchmarking studies and analysis for buildings and administrative system software, the DRC recommends retaining the average service lives of the two components reviewed.

3.5 Recommendations for the next DRC

Several recommendations have been identified for consideration for future DRC process, and they are as follows:

Recommendations for future DRC includes:

General

- Obtain input from the line of business, asset management and condition assessment groups through existing members of DRC;
- Investigate possibility of benchmarking OPG’s DRC process against similar processes followed by other companies;
- Provide advance notice of future DRC schedule; and
- Consider findings from the depreciation process review performed by Gannett Fleming Inc.

Nuclear

- Review plant condition assessment reports to ensure recommendations are consistent;
- Review nuclear assets intended to last the life of the plant such as process systems, to assess if assumptions are still valid;
- Reassessment of Darlington; and

Hydroelectric

The current net book value of OPG’s public safety booms is approximately $8M. The recommended change will increase annual depreciation expense by $1M.
- Review specific asset class recommendations raised which relate to how these assets are organized in the fixed asset sub-ledger such as:

1. Split auxiliary systems asset class into smaller categories including security systems;
2. Split fences from land and improvement asset class;
3. Consider splitting bus, switching and power cable and control boards and switchboards into separate categories; and
4. Consider distinguishing transformers between dry and oil type.
THE DEPRECIATION REVIEW COMMITTEE

Purpose

The mandate of the Depreciation Review Committee (DRC) is to review and make recommendations concerning service lives of major and minor fixed assets to the Senior Vice President and Chief Financial Officer for approval.

Timing

As the recommendations are finalized throughout the deliberation period, DRC members forward documentation supporting the resolution of items to the Chairperson of the DRC. Both the engineering and the financial/accounting aspects of the issues are addressed in the documentation.

Structure

The DRC includes a representative from each Business Unit having custody of major fixed assets as well as representatives having experience in financial and strategic planning.

The Committee is organized into two sub-committees Major Fixed Asset Committee and a Minor Fixed Asset Committee with the chairperson chairing both sub-committees.

Representatives on the DRC’s major fixed assets committee are shown in the following section.

Major Fixed Asset Committee

Corporate Accounting:
Tom Staines (Chairperson)
Dave Bell
Lubna Ladak
Vicki Teti
John Tipold

Regulatory Affairs:
Randy Pugh

Finance - Asset Management:
Eileen Louie
Fred Leschinsky

Finance - Investment and Business Planning:
Stephen Rogers

Business Unit Representatives:
Don Brazier – Finance Hydroelectric
Terry Karaim – Nuclear Engineering
Connie Leclaire – Finance Support Services
Mike Martelli – Hydroelectric Engineering
John Mauti – Finance Nuclear
Ken Ryfa – Finance Energy Markets

In addition to the Committee, other staff members provided support to the DRC’s work in 2006:

Corporate – Operational and Technical:
Lindy Civiero
Chris Hubbard
Stephen Mills

Hydroelectric - Operational and Technical:
Stefano Bomben
Pius Ko
Gord Haines
Bruce Hogg
Ian Munro

APPENDIX A
ONTARIO POWER GENERATION'S FIXED ASSETS

Ontario Power Generation categorizes its fixed assets as follows:

- major fixed assets under construction;
- major fixed assets in service;
- minor fixed assets

Major fixed assets under construction are comprised of land, buildings, plant, and equipment in the process of being acquired or constructed. The ultimate economic benefit of acquiring and constructing these assets is considered to relate to future periods.

Major fixed assets in-service consist of land, buildings, plant and equipment that have been declared in-service.

Minor fixed assets are comprised of transport and work equipment, service equipment, office furniture and equipment, computers other than those directly supporting the bulk electricity system and railway equipment. These assets are accounted for on a more detailed unit basis for control reasons.

OPG maintains extensive accounting records of the costs of its fixed assets. Their accumulated depreciation and retirements provide a history of the assets constructed or acquired by OPG. Consistent with the other major electrical utilities in North America, OPG maintains its fixed asset accounting records on the basis of asset classes.

For depreciation purposes, plant components having compatible service lives are aggregated into the standardized asset class accounts established for each of the following major fixed asset classifications:

- generation facilities
  - Nuclear
  - Fossil
  - Hydroelectric
- communications and system control facilities
- administration and service facilities

Aggregate of the values recorded in the asset classes form a property record for accounting purposes. A property record establishes a physical entity such as a generating station.
## DRC 2006 ASSET CLASS SELECTION

**As of February 1, 2006**

### Appendix C

<table>
<thead>
<tr>
<th># OF Assets</th>
<th>BU</th>
<th>Class #</th>
<th>Description</th>
<th>Note</th>
<th>Acquisition Value</th>
<th>Accumulated Depreciation</th>
<th>Net Book Value</th>
<th>Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HE</td>
<td>10200</td>
<td>Substructures and Super-structures</td>
<td></td>
<td>1,539</td>
<td>(105)</td>
<td>1,434</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>HE</td>
<td>10301</td>
<td>Lining of Tunnel and Permanent Shafts</td>
<td></td>
<td>269</td>
<td>(25)</td>
<td>244</td>
<td>075</td>
</tr>
<tr>
<td>3</td>
<td>HE</td>
<td>10302</td>
<td>Spillways, Sluices and Flumes</td>
<td>1</td>
<td>105</td>
<td>(10)</td>
<td>95</td>
<td>075</td>
</tr>
<tr>
<td>4</td>
<td>HE</td>
<td>10318</td>
<td>Gates Stoplogs and Operating Mechanisms</td>
<td></td>
<td>395</td>
<td>(49)</td>
<td>346</td>
<td>050</td>
</tr>
<tr>
<td>5</td>
<td>HE</td>
<td>10501</td>
<td>Main Rotating Electrical Plant Mach less Windings</td>
<td></td>
<td>300</td>
<td>(44)</td>
<td>256</td>
<td>075</td>
</tr>
<tr>
<td>6</td>
<td>HE</td>
<td>10502</td>
<td>Bus, Switching and Power Cable</td>
<td>2</td>
<td>115</td>
<td>(26)</td>
<td>89</td>
<td>045</td>
</tr>
<tr>
<td>7</td>
<td>HE</td>
<td>10503</td>
<td>High Voltage Switching</td>
<td>2</td>
<td>25</td>
<td>(5)</td>
<td>20</td>
<td>040</td>
</tr>
<tr>
<td>8</td>
<td>HE</td>
<td>10504</td>
<td>Control Boards and Switchboards</td>
<td>2</td>
<td>131</td>
<td>(47)</td>
<td>84</td>
<td>025</td>
</tr>
<tr>
<td>9</td>
<td>HE</td>
<td>10505</td>
<td>Station Service Electrical Equipment</td>
<td></td>
<td>85</td>
<td>(30)</td>
<td>55</td>
<td>050</td>
</tr>
<tr>
<td>10</td>
<td>HE</td>
<td>10510</td>
<td>Main Power and Station Service Transformers</td>
<td>2</td>
<td>181</td>
<td>(39)</td>
<td>142</td>
<td>050</td>
</tr>
<tr>
<td>11</td>
<td>HE</td>
<td>10531</td>
<td>Circuit Breakers</td>
<td>2</td>
<td>7</td>
<td>(1)</td>
<td>6</td>
<td>050</td>
</tr>
<tr>
<td>12</td>
<td>HE</td>
<td>10700</td>
<td>Auxiliary Systems</td>
<td>3</td>
<td>140</td>
<td>(34)</td>
<td>106</td>
<td>030</td>
</tr>
<tr>
<td>1</td>
<td>NUC</td>
<td>15200</td>
<td>Buildings and Structures</td>
<td></td>
<td>577</td>
<td>(201)</td>
<td>376</td>
<td>050</td>
</tr>
<tr>
<td>2</td>
<td>NUC</td>
<td>15340</td>
<td>Process Systems</td>
<td>2</td>
<td>484</td>
<td>(134)</td>
<td>350</td>
<td>040</td>
</tr>
<tr>
<td>3</td>
<td>NUC</td>
<td>15450</td>
<td>Condenser Tubing Pickering</td>
<td></td>
<td>116</td>
<td>(12)</td>
<td>104</td>
<td>030</td>
</tr>
<tr>
<td>4</td>
<td>NUC</td>
<td>15600</td>
<td>Instrumentation and Control</td>
<td></td>
<td>417</td>
<td>(116)</td>
<td>301</td>
<td>030</td>
</tr>
<tr>
<td>1</td>
<td>CORP A&amp;S</td>
<td>16210</td>
<td>Buildings and Site Improvements</td>
<td></td>
<td>179</td>
<td>(42)</td>
<td>137</td>
<td>050</td>
</tr>
<tr>
<td>2</td>
<td>CORP A&amp;S</td>
<td>16560</td>
<td>Administration and System Software</td>
<td></td>
<td>296</td>
<td>(212)</td>
<td>84</td>
<td>005</td>
</tr>
</tbody>
</table>

| 18 | Total |

| TOTAL MAJOR FIXED ASSETS TO BE Reviewed in 2006 | 5,361 | (1,132) | 4,229 |
| TOTAL MAJOR FIXED ASSETS                     | 13,000 | (2,963) | 10,037 |

2006 - % coverage based on NBV of assets: 0.42
2006 - % coverage based on # asset classes: 0.13

---

Note 1 – Recommended service life change
Note 2 – Further investigation recommended at next DRC
Note 3 – Partially deferred to next DRC
DEPRECIATION
REVIEW COMMITTEE
RECOMMENDATIONS

Regulated Business

December 2007
EXECUTIVE SUMMARY

Background and Scope of 2007 Review

The Depreciation Review Committee (DRC) annually reviews the service lives of all major facilities and a selection of asset classes, with the objective of reviewing all significant asset classes over a five year period. The facilities and assets of the regulated business are selected for review by the Approval Committee, which is comprised of the Chief Operating Officer, Chief Financial Officer, Chief Nuclear Officer, EVP Hydroelectric and Senior Vice President, Corporate Affairs. The Approval Committee also approves the recommendations of the DRC.

The scope of the 2007 DRC review focused on the end of life for all regulated facilities as approved by the Approval Committee. Based on input from the technical and engineering members of the DRC, who represent the business units, certain fixed assets were identified in both Nuclear and Regulated Hydroelectric stations that have significant impact in determining each station’s overall end of life date. Accordingly the DRC’s sample selection of assets reviewed were those that had a major impact on determining station end of life dates.

The technical and engineering review of the Nuclear line of business, for Pickering and Darlington facilities, indicated the expected service life of the pressure tubes is the predominant factor determining station end of life dates.

The DRC’s method of assessing the lives of major components to establish an end of life date of the Bruce facilities for depreciation review purposes had to be altered, mainly due to OPG’s limited access to technical data for the Bruce facilities. As such, for Bruce B, the DRC considered earlier knowledge of the life limits on the pressure tubes in relation to an assessment of Bruce Power’s operating intentions to develop a view on the expected lives of the units. Assumptions around operating intentions were derived based on reviewing future capacity plans filed with the Ontario Power Authority (OPA) and the term of the Bruce lease. For Bruce A, developments and related impacts are summarized based on plans filed with the OPA and recent 2007 publicly available information.

For the Regulated Hydroelectric line of business, the condition of the dams is the determining factor for estimating station end of life dates. Accordingly, the DRC has focused its review on the major asset classes related to the station dams.

Recommendations from 2007 Review

Based on its review of the evidence submitted, the DRC recommends the following:

Nuclear:

- The average service lives of Pickering A and B stations remain the same as in the 2006 review;
- The average service life of Darlington units should be extended by two years and revised from 2017 to 2019 effective January 1, 2008. This will also align the service lives with end of life dates of the major life limiting component and also align depreciation dates with those used to establish the decommissioning liability used by the Nuclear Waste Management Division (NWMD). The impact on depreciation for 2008 is a reduction of $18 million;
- The average service life of Bruce B should be extended by two years and revised from 2012 to 2014. The impact on depreciation for 2008 is a reduction of $7 million.
• The average service life of Bruce A should be extended by five years from 2030 to 2035. This revision is based on information made publicly available by Bruce Power and is consistent with analysis of the 2007 Integrated Power System Plan (IPSP) prepared by the OPA. On August 29, 2007, Bruce Power issued a press release that indicated that Bruce A unit 4 will be extended from 2017 to 2036.

Regulated Hydroelectric:

• The service lives of hydroelectric assets remain unchanged.
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APPENDIX A - THE DEPRECIATION REVIEW COMMITTEE

APPENDIX B - ONTARIO POWER GENERATION FIXED ASSETS

APPENDIX C – HISTORY OF PRIOR DRC RECOMMENDATIONS AND ASSET COVERAGE AND IMPACTS OF PROPOSED CHANGE
1.0 INTRODUCTION

1.1 Work of the Depreciation Review Committee

The Depreciation Review Committee (DRC) is accountable for providing a formal engineering, technical and financial review of major and minor fixed asset service lives. The DRC annually reviews the service lives of all major facilities and a selection of asset classes, with the objective of reviewing all significant asset classes over a five year period. The Approval Committee, which includes the Chief Operating Officer, Chief Financial Officer, Chief Nuclear Officer, EVP Hydroelectric and the Senior Vice President, Corporate Affairs, approved the review of the end of life dates of all generating facilities for the 2007 DRC (Appendix C).

In order to fulfill its objective of providing an engineering and technical review of the service lives of OPG fixed assets, it is important for the DRC to have representatives of the various lines of business who have substantial knowledge and expertise of the day to day operations of each of the various plants operated by OPG. As such, the Approval Committee is consulted to ensure that the appropriate technical and engineering staff are selected for the DRC. In addition to the technical and engineering review of the fixed assets, the DRC is also accountable for assessing the financial impact of any changes to service lives that it recommends. This is particularly important in the area of depreciation expense and its impact on OPG’s corporate financial statements, as well as budgets, forecasts and the rate application to the Ontario Energy Board. As such, financial staff are required for the DRC, particularly those involved with the calculation and analysis of depreciation expense and those involved in the preparation and analysis of OPG’s financial statements, budgets forecasts and rate regulated processes.

The 2007 DRC included representatives from Nuclear and Regulated Hydroelectric who have custody of major fixed assets and understand and have experience related to how the assets are operated, as well as representatives from finance. In addition, since a portion of OPG’s business is now regulated, representatives from Regulatory Affairs and Regulatory Finance were on the 2007 DRC.

DRC recommendations are documented in the DRC report, which is reviewed by DRC representatives and receives the concurrence of the Approval Committee. The goal, functions and structure of the Committee are outlined in detail in Appendix A.

The Committee’s recommendations are submitted to the Approval Committee for approval and implementation. Approved DRC recommendations are implemented on January 1st of the year following the year of review.

1.2 Scope of the Review for 2007

The Depreciation Review Committee’s deliberations for 2007 focused on the review of asset classes that have a direct impact on the end of life assumptions for Nuclear and Regulated Hydroelectric stations operated by OPG. As such, the assets selected for review were those that had a major impact on the station end of life dates. The scope also included the Bruce facilities service lives based on consideration of OPG’s past operating experience in conjunction with plans filed with the OPA.

2.0 Review of Station End-of Life - Nuclear

2.0.1 Overview

In conducting its 2007 review of Nuclear station end of life dates, the DRC has focused on different sources of evidence, depending on the site. For Pickering and Darlington, the review focused on the life limiting components (see section 2.1). For Bruce sites however, since access to detailed technical information on these plants by OPG personnel is limited, the DRC relied on other methods. For Bruce B, the DRC relied on published information regarding capacity factors (see section 2.2) and previous available information regarding the service lives of major life limiting components. For Bruce A, OPG relied on publicly available information released by Bruce Power during 2007 and assessment of the IPSP filed with the OPA.

2.1.0 Pickering and Darlington

In conducting its 2007 review of Pickering and Darlington facilities, the DRC has relied extensively on assessments performed by site technical staff and approved by Nuclear senior management in estimating unit end of life. These assessments were based on detailed reviews of plant components at Pickering and Darlington stations as documented in various condition assessments, life cycle plans and monitoring of unit performance. The end of life as estimated by senior management at Pickering and Darlington sites is based on the performance of four major components: feeders, steam generators, pressure tubes and reactor components. In each of these facilities, pressure tubes have been assessed as the life limiting components. Thus estimated end of life is based on the remaining life of each unit’s pressure tubes.

2.1.1 Pickering A, Units 1 and 4

Estimated end of life dates for Pickering A, Units 1 and 4 were based on plant reviews, assessments and inspections conducted throughout 2006. Based on this documentation, the DRC has noted the following:

- Most likely end of life dates are based on the remaining lives of the pressure tubes and are as follows in Equivalent Full Power Years (EFPY
which is defined as the life of a station based on running at full capacity):

<table>
<thead>
<tr>
<th>Unit</th>
<th>EFPY or Q1</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>21.0 EFPY</td>
<td>Q1 2022</td>
</tr>
<tr>
<td>Unit 4</td>
<td>23.3 EFPY</td>
<td>Q1 2028</td>
</tr>
</tbody>
</table>

- The Pickering A units were retubed in the late 1980’s to early 1990’s.
- The above estimated operating life dates are based on future capability factors consistent with the 2008-2012 Business Plan;
- The Pickering A unit lives will be revisited in the next DRC process as greater clarity is obtained around the refurbishment of the Pickering B units and potential impacts on Pickering A.

### 2.1.2 Pickering B

Estimated technical end of life dates for Pickering B units were assessed and documented by Nuclear management. Based on this documentation, the DRC has noted the following:

- Pressure tubes are expected to be the limiting component for all units and the service life limit for pressure tubes is predicted to occur at 24 Equivalent Full Power Years (EFPY);
- Based on future capability factors consistent with the 2008-2012 Business Plan, the estimated end of life dates are as follows:
  
<table>
<thead>
<tr>
<th>Units</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units 5 to 7</td>
<td>Q1 2014</td>
</tr>
<tr>
<td>Unit 8</td>
<td>Q1 2016</td>
</tr>
</tbody>
</table>

- The above estimated end of life dates do not factor in the potential to refurbish and life extend Pickering B;
- Degradation of the steam generators for all units has been identified as a risk that could impact on the reliability of the units to the current end of life; however, pressure tubes have been determined as the primary life limiting factor at this time.

### 2.1.3 Darlington

Estimated end of life dates for Darlington units were assessed and documented by Nuclear management. Based on this documentation, the DRC has noted the following:

- Pressure tubes are expected to be the limiting component for predicting service lives for all units and the nominal life limit for pressure tubes is 24 Equivalent Full Power Years (EFPY).
- The following estimated end of life dates are based on future capability factors consistent with the 2008 – 2012 Business Plan:
  
<table>
<thead>
<tr>
<th>Units</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units 1 and 2</td>
<td>Q1 2019</td>
</tr>
</tbody>
</table>

Based on inspection results, there is a high degree of confidence that feeders and steam generators for all units will not become the life limiting components.

### 2.2.0 Bruce Facilities

In gathering evidence to substantiate end of life dates for the Bruce facilities, since access to detailed technical data on life limiting components of the Bruce facilities by OPG personnel is limited, the DRC relied on other methods to estimate unit lives.

#### 2.2.1 Bruce B

With regards to Bruce B, the following two factors were considered:

- On August 29, 2007, the OPA filed the Integrated Power System Plan (IPSP) - a proposed 20-year plan for Ontario's Electricity System - with the Ontario Energy Board (OEB). Analysis of the 2007 IPSP indicates that, if Bruce B were to be refurbished, the refurbishment outages of the four Bruce B units would start between 2015 and 2019. Until the Bruce B units are taken out it is reasonable to assume that steps would be taken to keep the units available to the system. Hence, the implied service lives of these units are year end 2014, year-end 2015, year-end 2017 and year-end 2018 based on analysis of the IPSP.
- Based on historical information of life limits of pressure tubes for Bruce B units, the known in-service dates of the units and a conservative prediction of performance for the remainder of the units’ lives OPG calculated that, the units will achieve 24 EFPY as follows: B5 –2014, B6 –2014, B7 –2015 and B8 –2017. Using “average” unit nominal ends-of-life, the service life for the station would be set at year-end 2014 (i.e. the year-end prior to average unit nominal end of life of mid-2015).

#### 2.2.2 Bruce A

With regards to Bruce A, on August 29, 2007 a Bruce Power press release indicated that Bruce A Unit 4 will be refurbished and that the estimated service life will be extended from December 2017 to 2036. This information is also consistent with analysis of the 2007 IPSP prepared by the OPA. This extension to the life of Bruce Unit 4 impacts on the amortization of the asset value associated with the Asset Retirement Obligation (ARO) of Bruce A, which is currently being amortized based on average end of life of 2030. This change results in a revised average end of life for the Bruce A units of 2035. Based on an
average end of life date of 2035 the annual impact on depreciation effective January 1, 2008 is a reduction of $8 million.

2.3.0 DRC Recommendations – Nuclear End of Life Dates

Based on the review of the documentation submitted and discussions with Nuclear technical personnel, the DRC recommends the following with regards to Nuclear stations end of life dates:

A) Pickering A, Units 1 and 4 End of Life remains at 2021

Although the estimated technical end of life date for Unit 4 is 2028, it is considered appropriate to estimate the entire Pickering A station end of life is co-incident with Pickering Unit 1, as it is uncertain whether Pickering A Unit 4 would be economically viable operating as a single unit. There are also potential impacts on the viability of Pickering A depending on decisions made around the refurbishment and life extension of Pickering B. Given these uncertainties, the DRC is recommending that Pickering A unit’s end of life remain unchanged for both units and revisited in the next DRC process as greater clarity is obtained about the future of the Pickering B units.

B) Pickering B Units End of Life remains at 2014

This recommendation is consistent with the technical analysis of the end of life dates for life limiting components prepared by Nuclear senior management.

C) Darlington Units End of Life revised from 2017 to 2019

This recommendation is consistent with technical analysis of the end of life dates for life limiting components prepared by Nuclear senior management.

With regards to the implementation date for accounting purposes, the DRC proposes an effective date of January 1, 2008. Such a revision on that effective date will reduce depreciation for accounting purposes by $18 million per annum.

D) Bruce B units End of Life revised from 2012 to 2014

A conservative average end-of-life date for Bruce B is December 2014 based on running each unit to 24 EFPY. This is supported by OPG’s past operating experience and in line with OPA planning. Such a revision on that effective date will reduce depreciation for accounting purposes by $7 million per annum.

E) Bruce A Units End of Life revised from 2030 to 2035

Based on a recent announcement by Bruce Power relating to refurbishment of Bruce A, Unit 4 and the resulting extension of its life to 2036, the DRC recommends extension of the Bruce A station estimated end of life date to 2035. Such a revision will reduce depreciation for accounting purposes by $8 million per annum.

Table 2.3.1
Summary of End of Life Dates - Nuclear

<table>
<thead>
<tr>
<th>Station</th>
<th>Current End of Life Date (Dec. 31, unless otherwise stated)</th>
<th>Proposed by 2007 DRC effective Jan. 1, 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickering A Unit 1</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Pickering A Units 2 &amp; 3*</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Pickering A Unit 4</td>
<td>2021</td>
<td>2021</td>
</tr>
<tr>
<td>Pickering B</td>
<td>2014***</td>
<td>2014</td>
</tr>
<tr>
<td>Darlington</td>
<td>2017</td>
<td>2019</td>
</tr>
<tr>
<td>Bruce A**</td>
<td>2030</td>
<td>2035</td>
</tr>
<tr>
<td>Bruce B**</td>
<td>2012</td>
<td>2014</td>
</tr>
</tbody>
</table>

* Assets written off in 2005 as a result of the decision no to proceed with the refurbishment of the units.
** Assets are on lease to Bruce Power for 17 year term (commenced May 1, 2001).
***End of life occurs on September 30, 2014.

3.0 Review of Station End of Life - Regulated - Hydroelectric Facilities

3.0.1 Overview

Hydroelectric facilities have 6 regulated stations (Sir Adam Beck One, Sir Adam Beck Two, Sir Adam Beck Pump Generating Station, DeCew Falls One, DeCew Falls Two and Saunders). OPG has twenty-seven dams that are associated with stations in the Niagara Plant Group stations and three dams are associated with the R.H. Saunders Generating Station.

In conducting its 2007 review of Niagara Plant Group and R.H. Saunders stations, the DRC has relied extensively on recent assessments performed by site technical staff and approved by Hydroelectric senior management. As concrete dams are the life limiting component of any hydroelectric generating station, these assessments have been based primarily on detailed reviews of the condition of the dams at various Niagara Plant Group and R.H. Saunders sites.

3.0.2 Niagara Plant Group and R.H. Saunders Service Life Dates

The major asset classes associated with the dams of all Regulated Hydroelectric facilities were selected for review. The asset classes selected for review were #10101 (Excavating and Dredging), asset #10311 (Earth and Rock) and #10312 (Concrete) and comprise almost 50% of the
current net book value of Regulated Hydroelectric fixed assets in service.

The review of these three asset classes for both Niagara Plant Group and R.H. Saunders sites was conducted by senior Hydroelectric engineering personnel. Based on this review which considered the performance records of these dams, the findings of ongoing regular inspection, monitoring, and maintenance programs, the findings of dam safety periodic reviews and plant condition assessments, there is no evidence to support a change in asset service life. The results of this review have been approved by Hydroelectric senior management and have been documented in reports submitted to the DRC.

3.1.0 DRC Recommendations – Hydroelectric End of Life Dates

Based on the evidence submitted and discussions with engineering staff concerning the dams, the DRC is recommending that no change in end of life is required for all Regulated Hydroelectric facilities.
THE DEPRECIATION REVIEW COMMITTEE

Purpose
The mandate of the Depreciation Review Committee (DRC) is to review and make recommendations concerning service lives of fixed assets to the Approval Committee.

Timing
As the recommendations are finalized throughout the deliberation period, DRC members forward documentation supporting the resolution of items to the Chairperson of the DRC. Both the engineering and the financial/accounting aspects of the issues are addressed in the documentation.

Structure
The DRC includes representatives from each operating business unit, as nominated by the business unit representatives of the Approval Committee, as well as representatives having experience in finance, investment planning and rate regulation.

Representatives on the DRC are shown in the following section.

DRC members

Accounting:
Tom Staines (Chairperson)
Dave Bell
Lubna Ladak
John Tipold
Vicki Teti

Regulatory Affairs:
Randy Pugh

Finance - Asset Management:
Eleen Louie

Finance – Corporate Investment Planning:
Stephen Rogers
Jack Fong

Business Unit Representatives:
Don Brazier – Hydroelectric Finance
Fred Dermarkar - Nuclear Engineering
Peter Chan and Pius Ko – Hydroelectric Engineering
John Mauti – Nuclear Finance
Ontario Power Generation categorizes its fixed assets as follows:

- major fixed assets under construction;
- major fixed assets in service; and
- minor fixed assets

Major fixed assets under construction are comprised of land, buildings, plant, and equipment in the process of being acquired or constructed. The ultimate economic benefit of acquiring and constructing these assets is considered to relate to future periods.

Major fixed assets in-service consist of land, buildings, plant, and equipment that have been declared in-service.

Minor fixed assets are comprised of transport and work equipment, service equipment, office furniture and equipment, computers other than those directly supporting the bulk electricity system and railway equipment. These assets are accounted for on a more detailed unit basis for control reasons.

OPG maintains accounting records of the costs of its fixed assets. Their accumulated depreciation and retirements provide a history of the assets constructed or acquired by OPG. Consistent with the other major electrical utilities in North America, OPG maintains its fixed asset accounting records on the basis of asset classes.

For depreciation purposes, plant components having compatible service lives are aggregated into the standardized asset class accounts established for each of the following major fixed asset classifications:

- generation facilities
  - Nuclear
  - Hydroelectric
  - Fossil
- communications and system control facilities
- administration and service facilities

Aggregates of the values recorded in the asset classes form a property record for accounting purposes. A property record establishes a physical entity such as a generating station.
APPENDIX C

History of Changes to Nuclear Station End of Life Dates

Prior to this year’s DRC review, the table below summarizes end of life dates for nuclear stations:

<table>
<thead>
<tr>
<th>Stations</th>
<th>Service Life at April 1, 1999</th>
<th>Effective Date of Depreciation Change</th>
<th>Revised Average End of Life (December)</th>
<th>Estimated Annual Depreciation Impacts $M increase/decrease</th>
<th>2007 DRC Proposed Revised Life</th>
<th>Estimated Annual Impact of 2007 Review $M increase/decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pickering A Unit 1</td>
<td>Dec 2012</td>
<td>Nov 2005*</td>
<td>2021</td>
<td>22</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Pickering A Unit 4</td>
<td>Dec 2012</td>
<td>Jan 2004**</td>
<td>2017</td>
<td>(20)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Pickering B</td>
<td>Sept 2009</td>
<td>Jan 2006</td>
<td>2014</td>
<td>(37)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Darlington</td>
<td>Dec 2017</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>2019</td>
<td>(18)</td>
</tr>
<tr>
<td>Bruce A</td>
<td>Dec 2003</td>
<td>2006</td>
<td>2030</td>
<td>46****</td>
<td>2035</td>
<td>(8)</td>
</tr>
<tr>
<td>Bruce B</td>
<td>Dec 2010</td>
<td>2006</td>
<td>2012</td>
<td>(14)</td>
<td>2014</td>
<td>(7)</td>
</tr>
</tbody>
</table>

* From 1999 until November 2005, Pickering A Unit 1 was out of service
** From 1999 until October 2003, Pickering A Unit 4 was out of service
*** End of life date is September 2014
**** Prior to 2006 there was no asset value associated with the Bruce A Asset Retirement Obligation, as the station was fully depreciated. An asset value was assigned subsequently on December 31, 2006 following a change in estimate of the ARO related to Bruce A on that date.

Prior to this report the DRC has reviewed specific asset classes representing approximately $4 billion or approximately 40 percent of the total net book value of OPG’s major fixed assets.

<table>
<thead>
<tr>
<th>Summary of DRC Asset Coverage</th>
<th>Net Book Value $M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>1,200</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>2,800</td>
</tr>
<tr>
<td>Total</td>
<td>4,000</td>
</tr>
</tbody>
</table>