SUMMARY OF APPLICATION

OVERVIEW AND CONTEXT
This is an application for an order or orders of the Ontario Energy Board (“OEB”) approving payment amounts for OPG’s prescribed hydroelectric and nuclear generating facilities effective January 1, 2014, based on a January 1, 2014 – December 31, 2015 test period.

The revenue requirement requested in this application is based on forecast costs from January 1, 2014 through December 31, 2015. The basis for the application can be found in Ontario Regulation 53/05 and section 78.1 of the Ontario Energy Board Act, 1998 (the “Act”).

OPG’s prescribed generating facilities consist of both hydroelectric generating stations and nuclear generating stations, all of which participate in the IESO - administered electricity market in accordance with the Ontario Market Rules. The regulated facilities, which are the subject of this Application, consist of two nuclear generating stations with a total capacity of 6,606 MW and 54 hydroelectric generating stations (the regulated hydroelectric facilities) with a total capacity of 6,422 MW for a combined regulated generating capacity of 13,028 MW. The 54 hydroelectric stations include six stations that were prescribed in 2005 (the “previously regulated facilities”) and 48 stations (the “newly regulated facilities”) that will be prescribed in 2013. Further detail on the prescribed facilities is provided in Ex. A1-4-2 and Ex. A1-4-3.

SUMMARY
In its Decision and Order in EB-2010-0008, the OEB encouraged the participating parties to focus their attention in future applications on the highest priority issues (page 7). Accordingly, OPG has crafted its application in such a way as to highlight what it considers to be the highest priority issues. A description of these issues is set out below for easy reference.

1 The expected effective date for regulation of these facilities is July 1, 2014.
In September 2013, the Province posted for public comment an amendment to Ontario Regulation 53/05 that seeks to include all of OPG’s previously unregulated and non-contracted hydroelectric generation facilities within the OEB’s regulatory jurisdiction for setting payment amounts. The proposed amendment would result in the same regulatory treatments for the newly regulated hydroelectric assets as exists for the previously regulated hydroelectric assets. Accordingly, OPG has included a full discussion of those 48 facilities in this application, keeping them distinct from the previously regulated hydroelectric facilities. The material supporting their payments amounts follows the same filing guidelines for the test period as the previously regulated hydroelectric and nuclear facilities.

Cost control features prominently in OPG’s business planning and this application. OPG’s evidence demonstrates the significant cost control that the company has successfully undertaken over the past few years. Through the use of benchmarking, OPG has initiated activities to continue controlling cost and improving performance at its nuclear facilities in the test period and beyond as discussed in Ex. F2-1-1 OPG’s hydroelectric facilities continue to benchmark well overall on both cost and performance as discussed in Ex. F1-1-1 OPG proposes to continue the reinvestment and OM&A expenditures necessary to maintain performance.

**Business Transformation**

Consistent with this cost control approach, OPG has initiated a Business Transformation (“BT”) initiative, to support the alignment of OPG’s costs with its declining generation capacity and OPG’s mission to be Ontario’s low cost generator of choice. Under BT, OPG will use attrition to reduce its year-end 2015 headcount by 2,000 employees with the potential for further reductions in later years. This decreased headcount is expected to reduce OPG’s OM&A by $700M between 2011 and 2015.2 Additional information on BT can be found at Ex. A4-1-1

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2 Approximately 1,300 staff and $550M are attributable to regulated operations.
Niagara Tunnel Project
The Niagara Tunnel began operation on March 9, 2013. The Niagara Tunnel Project (“NTP”) was an extremely large, complex and challenging construction project that OPG completed safely and cost effectively given the conditions encountered. The emissions free electricity produced from the water flowing through the NTP will benefit the people of Ontario into the next century. Information contained within Ex. D1-2-1 will support the inclusion of the approximately $1,500M of costs associated with the NTP into regulated hydroelectric rate base.

Darlington Refurbishment Project
The continuation of the definition phase of the Darlington Refurbishment Project (“DRP”) will allow OPG to develop release-quality estimates for the cost and scope of activities necessary to allow Darlington to operate for an additional 30 years. Included as part of this application is a request for a finding that the commercial and contracting strategies used by OPG in respect of the DRP are reasonable, a request for approval of the proposed test period capital ($837.4M in 2014 and $631.8M in 2015) and OM&A expenditures ($19.6M in 2014 and $18.2M in 2015), and a request for approval of in-service additions to rate base ($5.0M in 2012, $104.2M in 2013, $18.7M in 2014, and $209.4M in 2015). The Darlington Refurbishment Project is discussed in Ex. D2-2-1.

Deferral and Variance Accounts
OPG proposes to clear the audited, year-end 2013 balances only for those accounts where review was deferred to a future proceeding in EB-2012-0002. These are: 1) Hydroelectric Incentive Mechanism Variance Account, 2) Hydroelectric Surplus Baseload Generation Variance Account, 3) Capacity Refurbishment Variance and the 4) Nuclear Development Variance Accounts. Details regarding proposed account clearance and riders are presented in Ex. H1-2-1, and details regarding the continuation of accounts are found in Ex. H1-3-1. OPG intends to seek review and clearance of the audited year-end December 31, 2014 balances in all of its deferral and variance accounts through a separate application to be filed in 2014.
PROPOSED PAYMENT AMOUNTS AND RIDERS

OPG is requesting that the OEB establish payment amounts of $44.20 per MWh for the previously regulated hydroelectric generation facilities and $66.99 per MWh for the nuclear generation facilities effective January 1, 2014, and $47.08 per MWh for the newly regulated hydroelectric generation facilities effective July 1, 2014.

In addition, OPG is requesting test period payment riders for the previously regulated hydroelectric and nuclear production to be derived as described in Ex. H1-2-1, to amortize the audited balances of the four deferral and variance accounts set out above as of December 31, 2013 as described in Ex. H1-1-2. The forecast combined effect of the new payment amounts and the payment riders, inclusive of the impact of regulating the previously unregulated and non-contracted hydroelectric stations, is an average increase of $5.36 on the monthly bill of a typical residential customer bill as described in Ex. I1-1-2.

These higher payment amounts for the previously regulated hydroelectric and nuclear facilities arise from total test period deficiencies of $330.8M and $1,511.2M, respectively. These are significant increases required to address significant deficiencies. Notwithstanding these increases, OPG remains the low-cost electricity provider in the province, delivering value and operating in the interest of Ontario.

It is important to consider OPG’s payment amounts within the context of the greater Ontario electricity industry as a whole. For the first six months of 2013, OPG’s average revenue was 5.6 cents per kilowatt hour, whereas the average revenue for all other electricity generators was 10.1 cents per kilowatt hour. For the three months ending June 30, 2013, the 10.1 figure jumps to 11.1 cents per kilowatt hour, while OPG’s average revenue stays at 5.6 cents per kilowatt hour. OPG provides a moderating effect on Ontario electricity prices. Further, when one considers that OPG has not had an increase in its base payment amounts for its

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3 Average revenue for OPG is comprised of regulated revenues, market based revenues, and other energy revenues primarily from agreements for the Nanticoke, Lambton and Lennox generating stations, and revenue from hydroelectric Energy Supply Agreements.

4 Revenues for other electricity generators are calculated as the sum of hourly Ontario demand multiplied by the HOEP, plus total global adjustment payments, plus the sum of hourly net exports multiplied by the HOEP, less OPG’s generation revenue.
regulated assets since April 1, 2008, the need for the proposed increases becomes clearer.

**Comparison of OPG and Non-OPG Average Electricity Prices**

![Bar chart: Average Ontario Electricity Price
Three Months Ended June 30](chart1)

![Bar chart: Average Ontario Electricity Price
Six Months Ended June 30](chart2)

**Drivers of Deficiency**

The increases in the base payment amounts for the previously regulated hydroelectric facilities and the nuclear facilities are largely driven by three main elements: an increase in pension and OPEB costs relative to what is included in current rates; higher costs relating to nuclear liabilities as a result of the ONFA Reference Plan approved in 2012; and the inclusion of the Niagara Tunnel in rate base.

In two of the three areas listed above (pension and OPEB and nuclear liabilities) much of the cost increase is caused by exogenous circumstances. Discount rates are a significant driver of these costs – rates that are market driven and, as such, impossible for OPG to control.

The inclusion of the Niagara Tunnel Project within hydroelectric rate base increases depreciation expense and results in an increased cost of capital within the revenue requirement in exchange for the benefits it will provide for at least the next 90 years. Additional details on drivers of deficiency are provided in Ex. A1-3-2.

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5 Source: OPG Q2, 2013 Management’s Discussion and Analysis (MD&A)
Controllable Costs

Despite that fact that the increase in proposed payment amounts is partially driven by external factors, OPG has nonetheless made progress in managing its controllable costs. As indicated above, through its BT initiative, OPG has put in place a framework that will allow OPG to reduce its headcount through attrition by 2000 employees by the end of the test period, resulting in a reduction to OM&A of $700M between 2011 and 2015. By rationalization of work, BT will ensure that these reductions can be maintained going forward. Additional details on BT are provided in Ex. A4-1-1.

Forecast compensation costs are largely a function of the collective bargaining agreements that cover about 90 per cent of OPG’s employees and by which OPG are bound. OPG cannot unilaterally reduce the compensation of its represented employees nor make staffing reductions affecting its represented employees beyond those permitted by its collective agreements. Within the constraints of these agreements, OPG has adopted a “net zero” mandate in its recent collective bargaining negotiations with both the Power Workers’ Union and the Society of Energy Professionals and has taken steps to reduce staff levels (hence total compensation costs), and modify its cost structure. This decreased headcount is expected to reduce OPG’s total OM&A by $700M between 2011 and 2015. Additional information on compensation costs can be found at Ex. F4-3-1.

Rate Base and Cost of Capital

The previously regulated hydroelectric rate base increase in 2013 is the result of placing the Niagara Tunnel in service. This increase in rate base is maintained through the test period. The total increase in previously regulated hydroelectric rate base in 2015 as compared to 2012 is $1,340.6M (Ex. B1-1-1 Table 1).

The rate base for the newly regulated hydroelectric facilities is $2,528.2M as at the end of 2015 (Ex. B1-1-1 Table 1).

*Approximately 1,300 staff and $550M are attributable to regulated operations.*
Nuclear rate base has declined from $3.895.3M in 2010 to $3,659.0M in 2015. The primary driver of changes in rate base is the change in asset retirement cost (“ARC”) component of nuclear rate base, which has declined from $1517.6M in 2010 to $1308.8M in 2015. Changes in the ARC component of the nuclear rate base over the 2010 - 2015 period relate primarily to the impact of ARC adjustments recorded January 1, 2010 (discussed in EB-2010-0008) and December 31, 2011 and December 31, 2012 (discussed in EB-2012-0002) and annual depreciation expense.

Further discussion of regulated rate base, including variance explanations, can be found in Exhibit B.

Additional details on in-service additions for the regulated hydroelectric and nuclear facilities, and corporate capital projects impacting rate base are provided in Exhibits D1, D2 and D3, respectively. Additional detail on depreciation and amortization expense is provided in Ex. F4-1-1.

In accordance with the Memorandum of Agreement with its shareholder, OPG is required to operate as a financially sustainable and commercial enterprise. OPG requires significant financial resources to fund required capital projects and related maintenance programs at the prescribed facilities. OPG, therefore, requires just and reasonable payment amounts so as to realize a fair rate of return on the prescribed assets. OPG has calculated its requested return on equity using the formula approved in the OEB’s Report in EB-2009-0084, applied to the regulated rate base using the capital structure of 47 per cent common equity, 53 per cent debt approved by the OEB in EB-2010-0008.

**Revenue Requirement**

OPG’s total revenue requirement is $4,698.0M for 2014 and $4,701.8M for 2015, excluding amortization of any variance and deferral accounts. OPG’s proposed revenue requirement for the test period is set out in Ex. I1-1-1 Table 1.
RECOVERY OF VARIANCE AND DEFERRAL ACCOUNT BALANCES

As noted above, OPG is requesting test period payment riders for previously regulated hydroelectric and nuclear production to amortize audited deferral and variance account balances as of December 31, 2013 as described in Ex. H1-1-2. These riders will reflect disposition for the period January 1, 2014 to December 31, 2015 of a portion of total deferral and variance account balances for regulated hydroelectric and nuclear production, and will be calculated as described in Ex. H1-2-1. OPG proposes to recover the balances only in those variance and deferral accounts for which review was deferred to a future proceeding in EB-2012-0002. Total amounts to be amortized over the test period are $62.9M for previously regulated hydroelectric and $73.1M for nuclear. Information regarding the continuation of deferral and variance accounts can be found in Ex. H1-3-1.

CONCLUSION

There are a number of significant issues addressed within this application. The payment amounts and riders resulting from this application are necessary for OPG to meet its obligation to operate the prescribed assets safely, reliably and efficiently for the benefit of the people of Ontario.