COMPARISON OF GROSS REVENUE CHARGE AND
OTHER WATER AGREEMENT COSTS –
REGULATED HYDROELECTRIC

1.0 PURPOSE
This evidence presents period-over-period comparisons of the gross revenue charge
(“GRC”), including other water agreement costs, for the regulated hydroelectric facilities for
2010 to 2015.

2.0 OVERVIEW
Ontario Regulation 124/02 (amended by O. Reg. 9/10, filed January 20, 2010) prescribes
that the fixed price of $40/MWh be used for determining GRC. This price was effective
throughout the historical period (2010 - 2012) and is expected to remain in effect for the

The total of GRC costs and costs pertaining to other water agreements is presented in
Exhibit F1-4-2, Table 1. Forecast and actual costs are compared for the years 2010 to 2015.
For the Niagara Plant Group and R.H. Saunders, GRC costs comprise about 98 per cent of
the total cost. GRC costs comprise about 86 per cent of the total for the newly regulated
hydro plants.

The other water agreement costs included with the Plant Group totals presented in Exhibit
F1-4-2, Table 1, consist of:

- Niagara PG - The St. Lawrence Seaway Management Corporation lease costs,
pertaining to water conveyance charges for water utilized at DeCew Falls.
- Ottawa-St. Lawrence PG – Government of Quebec water rental costs, Hydro Quebec
  Dozois Agreement costs pertaining to the Ottawa River plants, Hydro Quebec Bryson
  Agreement costs, and OPG’s share of Ottawa River Regulation Planning Board
  funding.
Northwest PG - H2O Power LP Agreement costs associated with energy losses incurred by private generating stations located upstream of Whitedog Falls, and OPG’s share of Lake of the Woods Control Board funding.

Central Hydro PG - Parks Canada water rental costs pertaining to licensed plants on the Trent River and Rideau Canal.

All Plant Groups except Niagara – Land rentals pertaining to Crown Leases and Licences of Occupation held with the Ontario Ministry of Natural Resources.

GRC is directly dependant on energy production. For the facilities where the energy production forecasts are derived using computer models that convert forecast water availability to forecast energy production using generating unit efficiency ratings and planned outage information, the differences between actual and forecast production that are attributable to changes in natural water conditions will be captured in the Hydroelectric Water Conditions Variance Account. These facilities include the Niagara Plant Group, R.H. Saunders and twenty-one of the newly regulated hydroelectric plants, located on nine river systems (See Ex. E1-1-1, Appendix 1). Changes in GRC associated with these energy variances are included in determining the account balance (See Ex. H1-1-1).

3.0 PERIOD-OVER-PERIOD CHANGES – TEST PERIOD

2015 Plan versus 2014 Plan

The year-over-year change of $18.2M in costs between the 2014 Plan and the 2015 Plan is primarily due to differences in the energy production forecasts for the two years. Costs are projected to increase from $328.9M in 2014 to $347.1M in 2015. The energy production forecast plan for 2015 of 32.7 TWh is 1.2 TWh more than the 2014 forecast of 31.4 TWh (Ex. E1-1-2). Government of Quebec water rentals (upper three Ottawa River plants) are expected to increase the Ottawa-St. Lawrence Plant Group cost by about $1.6M in 2015 as a result of a rate increase commencing January 2015.

2014 Plan versus 2013 Budget

The year-over-year change of $9.7M in costs between the 2014 Plan and the 2013 Budget is primarily due to differences in the energy production forecasts for the two years. Regulated
hydroelectric production is forecast to increase from 30.9 TWh in 2013 to 31.4 TWh in 2014 (Ex. E1-1-2). Costs are projected to increase from $319.1M in 2013 to $328.9M in 2014. Hydro Quebec Dozois agreement costs are expected to increase the Ottawa-St. Lawrence Plant Group cost by about $0.4M in 2014 due to an increase in the Bourque Dam refurbishment project payment schedule.

4.0 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEAR

2013 Budget versus 2012 Actual
The difference of $9.1M between the 2013 Budget ($319.1M) and 2012 actual costs ($310.1M) is due to differences between forecast and actual production. The production forecast for the 2013 Budget (30.9 TWh) is 5 per cent higher than actual production of 29.4 TWh achieved during 2012 (Ex. E1-1-2).

5.0 PERIOD-OVER-PERIOD CHANGES – HISTORICAL PERIOD

2012 Actual versus 2012 Board Approved
The difference between 2012 actual costs and the 2012 Plan is primarily due to differences between forecast and actual production. Actual cost for 2012 was $310.1M, $28.6M less than the 2012 Plan of $338.6M. Actual production during 2012 was 29.4 TWh, 2.9 TWh less than the production plan of 32.3 TWh (Ex. E1-1-2).

The reduction in cost due to reduced production for the Ottawa-St. Lawrence Plant Group was partially offset by an increase in costs ($0.8M) associated with the Hydro Quebec Dozois Agreement in 2012. (Annual cost share payments pertaining to the Bourque Dam refurbishment project commenced in 2012.)

2012 Actual versus 2011 Actual
The difference of $17.1M in cost between 2012 and 2011 was primarily due to year-over-year changes in production. Costs decreased from $327.1M in 2011 to $310.1M in 2012. Actual production decreased from 31.0 TWh in 2011 to 29.4 TWh in 2012 (Ex. E1-1-2).
The reduction in cost due to reduced production for the Ottawa-St. Lawrence Plant Group was partially offset by an increase in costs ($0.8M) associated with the Hydro Quebec Dozois Agreement in 2012. (Annual cost share payments pertaining to the Bourque Dam refurbishment project commenced in 2012.)

2011 Actual versus 2011 Board Approved

The difference between actual and plan costs for 2011 was due to changes between forecast and actual production. The plan production for 2011 was 32.3 TWh versus actual production of 31.0 TWh (Ex. E1-1-2). The decrease in production resulted in an $11.5M reduction in costs from $338.6M (plan) to $327.1M (actual).

2011 Actual versus 2010 Actual

The difference in cost between 2011 and 2010 is due to year-over-year changes in production. Actual production increased from 28.9 TWh in 2010 to 31.0 TWh in 2011 (Ex. E1-1-2). Costs increased by $20.0M, from $307.1M in 2010 to $327.1M in 2011.

2010 Actual versus 2010 Budget

The difference in cost between actual and budgeted amounts for 2010 is due to differences between forecast and actual production. The production plan for 2010 was 31.7 TWh versus actual production of 28.9 TWh (Ex. E1-1-2). This difference resulted in a $23.8M decrease in costs, from $331.0M (budgeted) to $307.1M (actual).