COMPARISON OF PROJECT OM&A -
REGULATED HYDROELECTRIC

1.0 PURPOSE
This evidence presents period-over-period comparisons of project OM&A for the regulated hydroelectric facilities.

2.0 PERIOD-OVER-PERIOD CHANGES
Year-over-year variances are presented by plant group in Ex. F1-T3-S2 Table 1 and by project category in Ex. F1-T3-S2 Table 2 and are explained here.

3.0 PERIOD-OVER-PERIOD CHANGES – TEST PERIOD
2012 Plan versus 2011 Plan
From 2011 to 2012, overall regulated hydroelectric OM&A project expenditures are expected to increase by $0.3M to a total of $10.0M. Of the total, Niagara Plant Group project expenditures are expected to decrease by $0.7M to $6.0M. This decrease is due to the completion of: the overhaul of Unit G8 at DeCew Falls I, repairs to the Elevator number 1 shaft at Sir Adam Beck I, concrete restoration of the Sir Adam Beck I screenhouse, and a number of other small projects. The decreases are offset by increased costs related to the major unit overhaul project at Sir Adam Beck Pump Generating Station (“PGS”). At R.H. Saunders, project expenditures are $1.0M more in 2012 than 2011. The increase is due to the project to remove existing lead-based paint and apply corrosion protection on the Barnhardt Island Bridge in 2012 at an estimated net cost of $3.4M. This is a Joint Works project with New York Power Authority (“NYPA”) and is regulatory (contractual) in nature. The increase related to the Barnhardt Island Bridge is offset by the completion in 2011 of the Ice Sluice Deck Support Beam Rehabilitation project at a planned cost of $2.0M.

Expenditures, when viewed by project category, show an increase in regulatory (contractual) projects due to the Barnhardt Island Bridge project planned for 2012, while sustaining projects decrease as a number of sustaining repair projects are completed in 2011.
2011 Plan versus 2010 Budget

From 2010 to 2011, overall regulated hydroelectric OM&A project expenditures are expected to increase by $4.4M to a total plan of $9.7M. This is comprised of an increase in Niagara Plant Group project expenditures of $2.7M and an increase of $1.7M at R.H. Saunders. Niagara Plant Group’s total increase results from planned rehabilitation work at DeCew Falls I Unit G8, the repairs to the Sir Adam Beck I elevator number 1 shaft, concrete restoration of the Sir Adam Beck I screenhouse, and the start of the Sir Adam Beck PGS major unit rehabilitation program. R.H. Saunders planned increase of $1.7M covers a number of small civil and mechanical repair projects. The largest project planned for 2011 is the $2.0M Ice Sluice Deck Support Beam Rehabilitation mentioned above.

Expenditures by project category show only a small increase in regulatory projects. The increase in sustaining projects is due to the repair projects described above.

4.0 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEAR

2010 Budget versus 2009 Actual

From 2009 to 2010, overall regulated hydroelectric OM&A project expenditures are expected to decrease by $3.8M to a total expenditure level of $5.3M. Niagara Plant Group OM&A project expenditures are expected to decrease from $8.0M to $4.0M in 2010. The significant drop in budgeted project costs for the Niagara Plant Group is due to the completion of a number of projects including the DeCew Falls 1 G6 turbine and generator overhaul, several large concrete repairs at Sir Adam Beck I and II, powerhouse crane repairs at Sir Adam Beck II, and the completion of the Unit PG6 overhaul and dyke repairs at Sir Adam Beck PGS. R.H. Saunders’ project OM&A expenditures are relatively unchanged at $1.1M in 2009 versus the 2010 budget of $1.2M.

Consistent with overall level of OM&A project spending, the expenditures by project category show decreases for both sustaining and regulatory projects in 2010 versus 2009. Regulatory projects are expected to decrease due to the completion of a number of small safety and environmental projects in 2009. Sustaining projects are expected to decrease due to the completion of the Niagara Plant Group projects described above.
5.0 PERIOD-OVER-PERIOD CHANGES – HISTORICAL PERIOD

2009 Actual versus 2009 Budget

For 2009, overall regulated hydroelectric OM&A project expenditures were $9.1M or $3.0M below budget. For the Niagara Plant Group, OM&A project costs were $2.3M below budget. The variance was mainly due to the deferral of the Sir Adam Beck I powerhouse roof replacement ($2.4M), offset by increased expenditures on other projects such as the Unit PG6 overhaul and dyke repairs at Sir Adam Beck PGS. The 2009 actual project OM&A expenses for R.H. Saunders were $0.7M lower than budget mainly due to lower than planned expenditures on Joint Works projects controlled by the New York Power Authority ("NYPA"), and the deferral of the cleaning of the R.H. Saunders’ main dam foundation drainage system. This project was deemed to be unnecessary at his time, as investigation work found the drains to be performing satisfactorily from a dam safety perspective.

For expenditures by project category, regulatory projects were $6.4M below budget while sustaining projects were $3.4M above budget for 2009. Regulatory projects were below budget due to the lower than planned expenditures on Joint Works projects at R.H. Saunders, the deferral or cancellation of a number of bridge projects in the Niagara Plant Group, and the deferral of canal erosion protection projects at DeCew Falls. The deferral of regulatory projects allowed for increased spending on sustaining projects, specifically the Unit PG6 overhaul and dyke repairs at Sir Adam Beck PGS, and additional spending on concrete repairs at Sir Adam Beck I.

2009 Actual versus 2008 Actual

From 2008 to 2009, overall regulated hydroelectric OM&A project expenditures decreased by $5.5M, from $14.6M to $9.1M. Niagara Plant Group OM&A project spending in 2009 was $2.4M lower than 2008 actual spending of $10.4M. Decreased spending at Niagara Plant Group was a result of the completion of Unit PG6 overhaul at the Sir Adam Beck PGS. OM&A project spending at R.H. Saunders was $3.0M lower in 2009 than in 2008 ($1.1M versus $4.2M). 2008 saw the completion of several regulatory and civil projects, the largest being the Eel Ladder Extension and Improvement project, and the rehabilitation of the access road and parking areas around the facility.
Consistent with the overall level of OM&A project spending, the expenditures by project category show decreases for both sustaining and regulatory projects in 2009 versus 2008. Regulatory projects decrease slightly due to the completion of the eel ladder at R.H. Saunders in 2008. Sustaining projects decrease due to the completion of Niagara Plant Group projects described above.

**2008 Actual versus 2008 Budget**

For 2008, overall regulated hydroelectric OM&A project expenditures were $14.6M or $1.7M higher than budget. Niagara Plant Group OM&A project spending in 2008 was $0.4M below budget. There was $3.2M in unexpected spending for a unit overhaul required at Sir Adam Beck PGS following the failure of seals in the Unit PG6 turbine runner resulting in oil leaks. This large unbudgeted repair and $0.6M in discovery work on Sir Adam Beck II powerhouse crane project required reduced expenditures and the deferral of other projects in order to maintain 2008 project spending within the approved budget for the Niagara Plant Group. The remaining $0.4M variance is a result of unused contingencies on completed projects. R.H. Saunders’ OM&A project spending in 2008 was $2.1M higher than budget as a result of the Eel Ladder Extension and Improvement project that was unplanned. The eel ladder had to be improved to bring the station into full regulatory compliance with the Ontario Endangered Species Act. Higher than originally planned contractor costs for several smaller projects also contributed to higher project spending at R.H Saunders.

For expenditures by project category, regulatory projects were $3.2M below budget while sustaining projects were $4.9M above budget for 2008. Regulatory projects were below budget due to the deferral or cancellation of a number of bridge repair projects in the Niagara Plant Group, offset by higher than planned spending on the Eel Ladder Extension and Improvement project at R.H. Saunders. Sustaining projects were above budget due to the unplanned expenditures described above, in particular, the Unit PG6 overhaul and dyke repairs at Sir Adam Beck PGS.
2008 Actual versus 2007 Actual

From 2007 to 2008, overall regulated hydroelectric OM&A project expenditures increased by $7.6M (from $7.0M to $14.6M). This is comprised of an increase in project expenditures of $3.9M in the Niagara Plant Group and an increase of $3.7M at R.H. Saunders. The Niagara Plant Group’s total increase results from $2.1M in underspent projects in 2007 combined with new projects identified above, offset by the deferral or cancellation of a number of bridge repairs (which will now be replaced or divested) and other projects. R.H. Saunders’ OM&A increased by $3.7M due to the addition of the unplanned Eel Ladder Extension and Improvement project and a number of other smaller civil and mechanical repair projects. These include: $0.7M for the rehabilitation of the access road and parking areas around the facility, $0.3M to complete the elevator rehabilitation project which was deferred from 2007 as discussed below, and several Joint Works projects controlled by NYPA.

For expenditures by project category, the increase in regulatory projects is mainly due to the addition of the eel ladder project and Joint Works projects at R.H. Saunders. The increase in sustaining projects is due to the addition of overhauls at DeCew Falls I Unit G8 and the Sir Adam Beck PGS Unit PG6, and the addition of several civil repair projects, offset by the completion of the major overhauls of the turbine-generators at DeCew Falls II in 2007.

2007 Actual versus 2007 Budget

For 2007, overall regulated hydroelectric OM&A project expenditures were $2.9M below budget. Niagara Plant Group expenditures were approximately $2.1M under budget. The reduced expenditures were a result of deferring the DeCew Falls G6 and G8 overhaul projects totalling $1.1M, the delayed execution of the DeCew Falls’ headworks road repairs project totalling $0.7M, and $0.4M underspent on the Sir Adam Beck I screenhouse wall repairs resulting from delays due to weather conditions.

R.H. Saunders’ OM&A project expenses in 2007 were $0.4M which was approximately $0.7M below the budget of $1.2M. This lower than planned spending was the result of reclassifying two projects to capital after determining that replacement was more cost effective than repair and upgrade ($0.3M) and deferring two projects into 2008 to allow for
better execution of the HVAC replacement project and the Station Service Water Replacement project. Deferred projects were the elevator rehabilitation ($0.3M) and the repair of dam safety instrumentation ($0.2M).