

## COMPARISON OF NUCLEAR OUTAGE OM&A

### 1.0 PURPOSE

This evidence presents period-over-period comparisons of outage OM&A by station.

### 2.0 OVERVIEW

This evidence supports the approvals sought for nuclear outage OM&A. Ex. F2-4-2 Tables 1 sets out the comparisons of nuclear outage OM&A for the historical, bridge and test years. Outage OM&A costs are impacted by the frequency, duration and scope of planned outages, as well as specific outage initiatives requiring support work, such as Pickering Continued Operations. The extent to which these specific factors influence outage OM&A in the 2014-2015 test period is discussed below.

### 3.0 PERIOD-OVER-PERIOD CHANGES – TEST PERIOD

#### 2015 Plan versus 2014 Plan

Outage OM&A expenditures are forecast to increase (+\$68.0M) from the 2014 plan levels, primarily due to the execution of the Vacuum Building Outage (VBO) at Darlington in addition to a regularly planned outage. Partially offsetting this increase is a forecast decrease in Pickering costs due to the completion of the Continued Operations program and the completion of the 20 day mid-cycle outage on Unit 1 in 2014.

#### 2014 Plan versus 2013 Budget

Outage OM&A expenditures are forecast to decrease (-\$48.3M) from 2013 plan levels. The main drivers of this decrease in outage OM&A costs are as follows:

- Darlington costs decrease (-\$30.9M) primarily due to the adoption of a 3 year outage cycle requiring only one outage in 2014 versus 2 unit outages in 2013, partly offset by increased preparatory work for the 2015 Vacuum Building Outage (VBO).
- Support Division (i.e. primarily Inspection and Maintenance Services) costs decrease (-\$25.7.0M) primarily due to only one Darlington outage in 2014 versus 2 Darlington unit outages in 2013.

- Pickering costs increase (+\$10.4M) primarily due to the required scope for rotors, spindles, inspection scope changes and other minor work program changes reflecting life cycle management requirements.

#### **4.0 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEAR**

##### **2013 Budget versus 2012 Actual**

Outage OM&A expenditures in 2013 are forecast to increase (+\$96.7M) from the 2012 actuals. The main drivers of this increase are the impact of Darlington's 3 year outage cycle requiring two outages in 2013 versus one unit in 2012, and additional inspection and maintenance work, and preparatory work for the 2015 Darlington VBO. Pickering's outage costs decrease slightly due to reduced work related to Continued Operations (-\$7.9M).

#### **5.0 PERIOD-OVER-PERIOD CHANGES – HISTORICAL YEARS**

##### **2012 Actual versus 2012 Board Approved (2012 Budget) <sup>1</sup>**

Actual outage OM&A expenditures increase (+\$13.1M) versus 2012 Budget. The actual to Budget variances shown for Darlington (-\$15.4M) and Pickering (-\$39.4M) are largely offset by a variance for the Support Divisions (+\$62.3M). The offsetting variances reflect the change in internal accounting for IMS costs. In the 2012 Budget, IMS costs were included as a component of the Station's Other Purchase Services. For 2012 actual, IMS costs are included within the Support Divisions costs. Pickering's Continued Operations actual outage OM&A costs were higher (+\$5.6M) than the 2012 Budget.

##### **2012 Actual versus 2011 Actual**

Actual outage OM&A expenditures were unchanged (-\$0.8M) in 2012 compared to 2011 actual. The 2012 actual to 2011 actual variances shown for Darlington (-\$16.2M) and Pickering (-\$40.7M) are largely offset by a positive variance for the Support Divisions

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<sup>1</sup>

As Board Approved adjustments shown on Ex. F2-1-1 Table 2 were made at the aggregate Nuclear OM&A level, the figures presented here are the 2012 Budget rather than the 2012 Board Approved.

1 (\$62.2M). The offsetting variances reflect the change in internal accounting for IMS costs as  
2 discussed above. Pickering's Continued Operations actual 2012 outage OM&A costs were  
3 lower (-\$6.1M) than the 2011 Actual.

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5 **2011 Actual versus 2011 Board Approved (2011 Budget)**<sup>2</sup>

6 Actual costs were on target (+\$0.2M) versus the 2011 Budget. There were decreases in  
7 outage OM&A costs due to minor changes in planned outage work at Darlington (-\$4.3M)  
8 and Pickering (-\$4.5M). These decreases were largely offset by an increase in outage  
9 OM&A (+9.3M) for Pickering Continued Operations reflecting a shift of work from Pickering  
10 Continued Operations project OM&A.

11  
12 **2011 Actual versus 2010 Actual**

13 Actual outage OM&A expenditures decrease (-\$63.2M) in 2011 compared to 2010 actual.  
14 The main drivers of this decrease in outage OM&A costs are as follows:

- 15 • Pickering costs are lower (-\$31.2M) in 2011 primarily as the result of the Pickering  
16 VBO that was completed in 2010, partly offset by work scope changes between the  
17 two years (e.g., turbine blade replacement work was completed in 2010, but more  
18 than offset by single fuel channel replacement work in 2011).
- 19 • Pickering Continued Operations costs are higher (+\$19.3M) in 2011, reflecting a  
20 change in the nature of the work from project OM&A to outage OM&A (additional  
21 SLAR work).
- 22 • Darlington costs decreased (-\$49.4M) in 2011 primarily as a result of the 36-month  
23 outage cycle, with one planned outage in 2011 compared to two planned outages in  
24 2010. In addition, 2011 outage costs are lower, as 2010 includes turbine blade  
25 replacement costs.

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<sup>2</sup> As Board Approved adjustments shown on Ex. F2-1-1 Table 2 were made at the aggregate Nuclear OM&A level, the figures presented here are the 2011 Budget rather than the 2011 Board Approved.

1    **2010 Actual versus 2010 Budget**

- 2    Actual outage costs in 2010 were below budget (-\$6.4M), due to less than forecast  
3    expenditures on material and labour, primarily due to lower than budgeted costs for the  
4    Pickering VBO which was completed ahead of the planned schedule.