

COMPARISON OF BASE OM&A – NUCLEAR

1.0 PURPOSE

This evidence presents period-over-period comparisons of base OM&A costs for the nuclear facilities for 2010 - 2015.

2.0 OVERVIEW

Base OM&A costs increase from 2012 Actual to 2015 Plan by +\$51.4M, which is an average of approximately 1.55 per cent per year over this three year period. The primary factor for this increase is labour escalation and pension/other post-employment benefits ("OPEB") costs which increased base OM&A costs by an average of 2.20 per cent per year. Also OPG has reduced base OM&A expenditures on work programs over the three year period by pursuing non labour cost savings and planned staff reductions as part of Business Transformation (Ex. A4-1-1). This has helped mitigate total base OM&A cost increases.

Year-over-year changes and historical period variances to budget are presented in Ex. F2-1 Tables 1.

Net reportable variances and year-over year changes (10 per cent or greater at the function level, subject to a minimum materiality limit of \$1M) are discussed below.

3.0 PERIOD-OVER-PERIOD CHANGES – TEST PERIOD

2015 Plan versus 2014 Plan

Planned base OM&A in 2015 is \$1,154.0M, which is \$2.9M (0.25 per cent) higher than the 2014 Plan amount of \$1,151.1M. Year over year labour and pension/OPEB cost escalation is \$17.3M.

The only reportable variance is in the Darlington Work Management category (+\$2.1M variance equal to a 16.2 per cent increase) which primarily reflects additional costs for outage planning due to the 2015 Vacuum Building Outage.

2014 Plan versus 2013 Budget

Planned base OM&A in 2014 is \$1,151.1M, which is \$11.5M (1.0 per cent) higher than the 2013 Budget amount of \$1,139.6M. Year over year labour and pension/OPEB cost escalation is \$9.0M.

The reportable variances are:

- Darlington Work Management (-\$3.2M variance equal to a 19.8 per cent decrease): primarily reflects lower costs for outage planning due to the reduced number of planned outages in 2014 compared to 2013.
- Darlington Tritium Removal Facility (-\$1.8M variance equal to 9.8 per cent decrease): primarily reflects a reduced level of required maintenance in 2014 compared to 2013.
- Pickering Operations (+\$14.4M variance equal to 14.4 per cent increase): primarily reflects higher labour costs due to additional Authorized Nuclear Operators in Training ("ANOIT") and Nuclear Operators in Training ("NOIT") staff as no NOITs are forecast to be hired in 2013.
- Projects and Modifications (-\$1.3M variance equal to 18.1 per cent decrease): primarily reflects reduced operational support during the 2014 planned outages compared to 2013.

4.0 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEAR

2013 Budget versus 2012 Actual

Planned base OM&A in 2013 is \$1,139.6M which is \$37M (3.35 per cent) higher than the 2012 Actual amount of \$1,102.6M. This includes year over year labour and pension/OPEB cost escalation of \$46.4M. Base OM&A costs in 2012 versus 2013 Budget were impacted by the 53rd fiscal week in 2012 (-\$15.3M). There were also some internal organizational changes within nuclear operations in 2013 as a result of Business Transformation which do not impact on overall Base OM&A costs.

The reportable variances are:

- Darlington Site Support (+\$4.5M variance equal to 33.3 per cent increase): reflects transfers under Business Transformation (+\$1.8M). In addition, the variance reflects

1 changes in internal accounting whereby certain costs directly charged to Darlington
2 Maintenance in 2012 are now being budgeted in Site Support in 2013.

- 3 • Pickering Operations (-\$18.8M variance equal to a 15.9 per cent decrease): reflects
4 transfers under Business Transformation (-\$11.7M). The 2013 Pickering Operations
5 budget is also lower compared to 2012 reflecting expectations of additional staff
6 reductions and lower projected overtime costs.
- 7 • Pickering Site and Support Services (+\$5.7M variance equal to a 12.21 per cent
8 increase): primarily reflects program expenditure increases on environmental studies,
9 chemistry lab upgrades and change room upgrades.
- 10 • Projects and Modifications (-\$7.4M variance equal to a 53.22 per cent decrease):
11 primarily reflects lower staff levels (achieved through attrition) and costs through the
12 implementation of an Engineering, Procurement and Contracting model with vendors
13 for various projects and the internal transfer of certain staffing costs to projects. In
14 addition there were transfers under Business Transformation (-1.0M).
- 15 • Nuclear Engineering (+\$13.2M variance equal to a 9.5 per cent increase): primarily
16 reflects transfers under Business Transformation (\$5.3M) as well as the deferment of
17 certain work activities scheduled for 2012 (Pressure Tube Surveillance and
18 Equipment Reliability activities) into 2013.
- 19 • Nuclear Services (+\$7.8M variance equal to an 11.7 per cent increase): primarily
20 reflects transfers under Business Transformation (\$5.9M). There is also a projected
21 increase in CNSC fees in 2013.
- 22 • Fleet Operations and Maintenance (+\$21.9M variance equal to 265.2 per cent
23 increase): primarily reflects transfers under Business Transformation (+\$22.0M).
- 24 • Security and Emergency Services (+\$18.1M variance equal to 27.4 per cent
25 increase): primarily reflects transfers under Business Transformation (\$17.2M) There
26 is also a savings arising from the transition from an external to internal security force.
- 27 • Other Support (-\$ 8.3M variance equal to 16.4 per cent decrease): primarily reflects
28 higher 2012 costs including the 2012 write-off of inventory, grievance settlements,
29 additional organizational changes arising from business transformation , inventory
30 obsolescence provisions and some additional 2012 CNSC costs partially offset by the
31 inclusion in this account in 2013 of the labour rate balancing adjustment.

5.0 PERIOD-OVER-PERIOD CHANGES – HISTORICAL PERIOD

2012 Actual versus 2012 Board Approved (2012 Budget) ¹

Actual Base OM&A in 2012 is \$1,102.6M, which is \$124.3M (10.1 per cent) lower than the 2012 Budget of \$1,226.9M.

The decrease is primarily due to a transfer of costs and staff in 2012 from Nuclear to corporate or internal organizational changes within nuclear operations as a result of Business Transformation. Actual Base OM&A in 2012 is \$72.1M or 7.0 per cent higher than the 2012 Budget normalized for Business Transformation (i.e. 2012 Budget excluding \$196.4M transfers).

The reportable variances are:

- Pickering Maintenance (+\$19.6M equal to 9.1 per cent increase): primarily reflects increased labour and contractor costs and materials to address backlog reductions and other work program activities (e.g. Asbestos Abatement). Also Pickering incurred increased material and labour costs for fuel handling rebuilds; and higher costs arising from various Forced Outages.
- Nuclear Engineering (+\$83.7M variance equal to a 147.9 per cent increase): primarily reflects transfers under Business Transformation (\$78.2M). In addition, certain work activities schedule for 2012 (Pressure Tube Surveillance and Equipment Reliability activities) were deferred into 2013, resulting in lower 2012 actual costs compared to 2012 Budget.
- Security and Emergency Services (+\$6.6M variance equal to 11.1 per cent increase): primarily reflects t transfers under Business Transformation (\$11.4M). There was a

¹

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 transition from an external to internal security force in 2012 resulting in actual internal
2 security costs lower than plan.

- 3 • Inspection Maintenance Service (+\$4.7M variance equal to 14.9 per cent increase):
4 primarily reflects a change in the IMS cost model, which does not impact on total
5 base OM&A costs. Prior to 2012, the majority of IMS Base program costs were
6 charged to and recorded as Darlington and Pickering station costs. Beginning in
7 2012, IMS costs are separately budgeted and not charged to the stations.
- 8 • Projects and Modifications (+\$8.9M variance equal to a 176.5 per cent increase):
9 primarily reflects increased internal staff for a core team under the 2012 Extended
10 Services- Master Service Agreement and increased costs to provide project support
11 for projects such as Fukushima.
- 12 • Other Support (+\$20.9M variance equal to 70.6 per cent increase) primarily reflects a
13 2012 write off of inventory and Pressure Boundary legacy material as well as an
14 inventory obsolescence provision.

15
16 **2012 Actual versus 2011 Actual**

17 The 2012 Base OM&A is \$1102.6M, which is \$146.5M (11.7 per cent) lower compared to the
18 2011 Actual of \$1,249.1M. The decrease is primarily due to Business Transformation that in
19 2012 transferred costs and staff from Nuclear into Corporate or transferred costs internally
20 within the nuclear operations organization. Base OM&A costs in 2012 versus 2011 were also
21 impacted by the 53rd fiscal week in 2012 (+\$15.3M).

22
23 Reportable variances are:

- 24
25 • Darlington TRF (+\$2.8M equal to a 17.9 per cent increase): primarily reflects
26 increased compressor maintenance work in 2012.
- 27 • Pickering Maintenance (-\$5.4M equal to 2.3 per cent decrease): primarily reflects
28 reduced overtime and material costs due to improved fuel handling performance in
29 2012; lower costs due to various value for money initiatives (laundry service;
30 Pickering amalgamation), reduced work program activities and lower costs for 2012
31 forced outages versus 2011.

- 1 • Darlington Support Services (-\$8.5M equal to 37.5 per cent decrease): primarily
2 reflects transfers under Business Transformation (-\$11.6M).
- 3 • Pickering Support Services (-\$24.6M equal to 34.5 per cent decrease): primarily
4 reflects transfers under Business Transformation (-\$21.1M). In addition, reduced
5 laundry costs in 2012 due to changes in cost recovery following Pickering
6 amalgamation.
- 7 • Projects & Modifications (+\$6.3M variance equal to 80.2 per cent increase): primarily
8 reflects increased internal staff for a core team under the 2012 Extended Services-
9 Master Service Agreement
- 10 • Nuclear Engineering (+\$81.9M variance equal to a 140.7 per cent increase): primarily
11 reflects transfers under Business Transformation (+\$78.2M).
- 12 • Inspection Maintenance Service (+\$7.5M variance equal to 26.2 per cent increase):
13 primarily reflects a change in the IMS cost model, which does not impact on total
14 base OM&A costs. Prior to 2012, the majority of IMS base program costs were
15 charged to and recorded as Darlington and Pickering station costs. Under the new
16 IMS cost model introduced in 2012, IMS costs are budgeted directly as IMS costs and
17 not charged to the stations. In addition, IMS supply chain was transferred to corporate
18 Business and Administration Services.
- 19 • Security and Emergency Services (+\$9.1M variance equal to 16.0 per cent increase):
20 primarily reflects transfers under Business Transformation (+11.1M). The transition
21 from an external to internal security force results in a net savings of \$3.4M.
- 22 • Other Support (+\$35.0M variance equal to 224.31 per cent increase): primarily
23 reflects a 2012 write off of inventory and Pressure Boundary legacy material, an
24 inventory obsolescence provision and higher low and intermediate waste costs,
25 partially offset by lower 2012 labour price variance

26
27 **2011 Actual versus 2011 Board Approved (2011 Budget)**

28 Actual Base OM&A in 2011 is \$1,249.1M which is \$49.7M (4.1 per cent) higher than the
29 2011 Budget of \$1,199.4M.

30
31 Within the stations, the reportable variances are:

- 1 • Fuel Handling (+\$12.7M) reflecting extra expenditures at Pickering (+\$9.8M) and
2 Darlington (+\$2.9M) to improve fuel handling system reliability.
- 3 • Radiation Protection, Chemistry and Environment (+\$10.0M) primarily reflecting
4 increased effort at Pickering to support forced outages (e.g. gadolinium issue) and
5 reclassification of outage crew to base OM&A (this increase is offset by a decrease in
6 outage OM&A).
- 7 • Pickering Common Services (+\$3.5M) reflecting additional work program effort (e.g.
8 standby generator recovery, laundry/protective suits for forced outage support).

9
10 In addition, a number of the reportable station variances are due to the re-assignment of
11 costs or transfer of staff between departments and have no impact on overall OM&A costs.
12 Specifically:

- 13 • Work Management (+\$4.9M) reflecting primarily Darlington (+\$2.4M) and Pickering
14 (+\$2.5M) organizational budget transfers.
- 15 • Support Services (-\$8.0M) reflecting:
 - 16 ○ Darlington (-\$13.9M) due to organization budget transfers (-\$8.9M, offset at
17 station and Nuclear level); and under-forecast 2011 material credits (-\$3.2M).
 - 18 ○ Pickering (+\$5.9M) primarily due to assignment of station cost reduction
19 commitment (-\$4.5M) to Support Services in Board approved budget, while 2011
20 actual cost reductions are within various divisions.

21
22 Within the support divisions, the reportable variances are as follows:

- 23 • Other Support (-\$7.2M of -\$10.4M) reflecting primarily Labour Price Variance less
24 than plan (-\$3.4M); less than planned nuclear level consultants (-\$2.4M); and, a
25 reduced level of annual support for the University of Ontario Institute of Technology
26 (-\$1.0M).

27
28 In addition, the following variances reflect budget or accountability transfers, and have *no net*
29 *impact on Nuclear OM&A costs*:

- 30 • Projects & Modifications (+\$2.4M) reflecting increased station support work (e.g.
31 Fukushima support), the budget for which was transferred from stations.

- Other Support (-\$3.2M) reflecting primarily transfer of Performance Improvement function to Nuclear Programs and Training.

2011 Actual versus 2010 Actual

Base OM&A increased by \$67.6M (5.7 per cent) from 2010 to 2011.

Within the stations, the reportable changes are:

- Operations (+\$19.8M) primarily reflecting increased pension and OPEB costs, and increased workforce development hiring to ensure availability of qualified authorized staff and nuclear operators in training.
- Pickering Common Services (+\$3.8M) reflecting additional work (e.g. standby generator recovery, laundry/protective suits for forced outage support).
- Support Services (-\$3.8M) primarily reflecting 2011 organizational budget transfers (-\$4.1M) and under forecast 2011 material credits at Darlington; offset by additional costs at Pickering to support two WANO visits in 2011 and greater than planned laundry costs.
- Pickering Continued Operations (+\$12.5M) reflecting planned work flow of this initiative.

Within the support divisions, the only reportable change is Other Support (+\$3.0M) reflecting primarily re-establishment of support for the University of Ontario Institute of Technology (+\$1.0M, not incurred in 2010), and a change in the classification of low and intermediate level waste management variable expenses, which were previously reported as depreciation expense (+\$0.9M).

2010 Actual versus 2010 Budget

Base OM&A in 2010 is \$5.6M (0.5 per cent) under budget.

Within the stations, the reportable variances are:

- Pickering Continued Operations (-\$5.0M) reflecting minor work deferrals to allow completion of work planning.

- Pickering Refurbishment (-\$1.0M) reflecting less than planned costs to close out this initiative.

In addition, a number of the reportable station variances are due to the re-assignment of costs or transfer of staff between departments. Specifically:

- Radiation Protection, Chemistry and Environment (+\$5.2M) reflecting primarily Pickering (+\$4.0M) due to transfer of seasonal staff from outage OM&A to base OM&A.
- Support Services (-\$4.6M) reflecting primarily Darlington (-\$5.3M) due to the impact of organizational transfers within 2010 that cause costs and budgets to be in different departments (i.e. Fire Protection from Support Services to Maintenance, PINO and Regulatory Affairs from Support Services to Nuclear Programs & Training, etc).

Within the support divisions, the reportable variances are:

- Nuclear Programs and Training (+\$6.4M of \$13.3M) reflecting increased CNSC fees, that are reflected in the 2011 Board Approved amounts.

In addition, the following variances reflect budget or accountability transfers, and have *no net impact on Nuclear OM&A costs*:

- Nuclear Programs and Training (+\$6.9M) reflecting transfer of PINO and Regulatory Affairs from stations, and Performance Improvement from Nuclear Oversight.
- Other Support (-\$16.9M) including
 - Nuclear Oversight (-\$3.5M) reflecting transfer of Nuclear Improvement to Nuclear Programs and Training as indicated above, and,
 - Nuclear Level Common (-\$11.5M) reflecting better than anticipated cost performance on the 2010 Pickering VBO, less than planned Labour Price Variances and expenditures on external consultants.