

DETAILS OF OM&A PROJECTS – NUCLEAR

1.0 PURPOSE

This evidence provides project listings and supporting information, including business case summaries, for planned OM&A project expenditures for nuclear.

2.0 OVERVIEW

A tiered reporting structure consistent with the OEB filing guidelines has been used to present the evidence for all OM&A projects which have budgeted expenses during the test period.

- Tier 1 - Projects with a total cost of \$20M or more. Summary level information is provided (see Ex. F2-3-3, Table 1), as well as business case summaries (Attachment 1).
- Tier 2 - Projects with a total cost of \$5M to \$20M, for which summary level information is provided (see Ex. F2-3-3, Table 2).
- Tier 3 - Projects with a total cost of less than \$5M, for which aggregated information is provided (see Ex. F2-3-3, Table 3).

For Tier 1 projects, Ex. F2-3-3 Table 1 provides information on ten released projects with a total project cost of \$20M or more. These include five ongoing projects from EB-2010-0008, two completed projects, one deferred project and two new projects. Further details on these projects are provided in section 3.0.

For Tier 2 projects, Ex. F2-3-3 Table 2 provides information on the 23 released projects with total project costs between \$5M and \$20M. These include seven ongoing projects from EB-2010-0008, six completed projects from EB-2010-0008 and ten new projects. Total cost of these projects is \$189.5M.

For Tier 3 projects, Ex. F2-3-3 Table 3 provides summary level information on the 38 projects with total project costs less than \$5M. The average value of these projects is \$1.9M.

As per Ex. F2-3-3 Table 4, there are a total of 29 projects categorized as Project Portfolio – Unallocated. These projects are currently in the project identification or project definition phases, and detailed expenditure information by project is not available. OPG expects that by the test period, some of these listed projects (or other projects yet to be identified) would move from the project identification and initiation phases into project definition or execution phase as part of the ongoing portfolio management process. None of these projects are currently forecast to cost more than \$20M.

3.0 PROJECT-SPECIFIC INFORMATION - TIER 1 PROJECTS

The following information relates to projects identified in Ex. F2-3-3 Table 1.

3.1 New Projects

Two new Tier 1 projects have been undertaken since EB-2010-0008. The objective of project #38933, Primary Heat Transport Liquid Relief Value Modifications to Prevent Water Hammer is to address valve and piping degradation caused by valve-induced water hammer, to ensure continued relief valve functioning and over-pressure protection. The objective of project #62449, Severe Accident Management Guidelines Implementation Improvements, is to improve OPG's Severe Accident Management Program by incorporating the lessons learned from the 2011 Fukushima Daiichi incident.

3.2 Completed Projects (from EB-2010-0008)

Two Tier 1 projects have been completed as of year-end 2012 (project #38458, Darlington EQ Discovery Work and Scope Reduction and project #40645, Pickering Steam Generator Water Lancing). Both projects were completed for less than budget.

3.3 Deferred/Cancelled Projects (from EB-2010-0008)

One Tier 1 project identified in the last filing (project #38935, Darlington Boiler Primary Side Cleaning), was deferred due to other higher priority work.

3.4 Project Cost Variances

As noted in Section 3.2, all completed projects were completed within budget.

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2 There is one ongoing Project #40641, Pickering Boiler Tab and Divider Plate Repair (P7 &
3 P8) has an approved superseding release that exceeds the initial full release by more than
4 10 per cent. This project was released in March 2007, with an estimated cost of \$20.5M and
5 a scheduled completion of year-end 2010. The project was not completed as planned in
6 2010 due to accessibility problems associated with higher than expected radiation fields.
7 This resulted in a need to re-mobilize the project crew to complete the project in 2012 during
8 the next available unit outage and develop a new approach using specialized tooling. The
9 currently approved project cost is \$39.4M. The superseding release is included in
10 Attachment 1.

LIST OF ATTACHMENTS

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Attachment 1: Business Case Summaries

ATTACHMENT 1

Table 1 is a listing of Tier 1 projects with expenditures during the test period or Tier 1 projects completed/deferred from EB-2010-0008. The business case summaries are attached¹.

Table 1
Business Case Summaries

Tab No.	Project Number	Business Case Summary (BCS) Title	BSC Approval Date
ONGOING PROJECTS FROM EB-2010-0008			
1	38457	Darlington Environment Qualification Component Replacements	Jan-08
2	40641	Pickering B Boiler Tab & Divider Plate Repair (Pickering 7 & Pickering 8)	Dec-10
3	49248	Pickering A Locking Tabs - Boiler Divider Plate (Pickering 1 & Pickering 4)	Dec-11
4	62440	Probabilistic Risk Assessment Upgrade	Apr-12
5	62444	Fuel Channel Life Management	Oct-12
COMPLETED PROJECTS FROM EB-2010-0008			
6	38458	Darlington Environment Qualification Discovery Work and Scope Reduction	Apr-10
7	38935	Darlington Boiler Primary Side Cleaning (follow-up to 38296)	Jun-08
8	40645	Pickering B Steam Generator Water Lancing	May-07
PROJECTS NOT IN EB-2010-0008			
9	38933	Darlington Primary Heat Transport Liquid Relief Valve Modifications To Prevent Waterhammer	Jul-11
10	62449	Severe Accident Management Guidelines Implementation Improvements	Jul-12
11	80014	Fuel Channel Life Extension Project	Nov-13

¹ OPG has requested confidential treatment of certain business case summaries under the OEB's Practice Direction for Confidential Information.