

Attachment 3

Gap Closure Initiatives 2013 - 2015 Nuclear Business Plan

Part A: Reliability Improvement Initiatives

Purpose	Description	Initiative	Implementation Year and Status
Chemistry Performance	Chemical additives and improved filtration to reduce corrosion products formation and transport.	Darlington Chemistry Performance: DN-R-05-	2012-In Progress
		Pickering Chemistry Performance: NFI-03	2011- In Progress
	Impact: Improves WANO Nuclear Performance Index (NPI) and Chemistry Performance Indicator.		
Work Order Backlog Reduction	Improvement of backlogs by ensuring critical work orders are scheduled and performed on a priority basis. Accomplished by reducing inflow of work orders and improvements to work order readiness.	Darlington Backlog Reduction Base Work Program: DN-R-02	2011- In Progress
		Pickering Maintenance Backlog Reduction: NFI-04 (Corrective) and PNGS-R-03 (Deficient)	2011 – In Progress
		Work Order Readiness – EN-01	2010-Completed and Closed.
	Impact: Improves WANO NPI, Forced Loss Rate, Unit Capability Factor, Chemistry Performance Indicator, Online Corrective and Deficient Maintenance Backlogs.		
Equipment Reliability	Sustain high level of equipment reliability and reduce forced losses.	Maintenance Backlog Reduction: PNGS-R-03	2012-In Progress
	Focus on major equipment reliability projects (e.g. fuel handling, preventive and	Darlington Fuel Handling Reliability: DN-R-06	2012-In Progress

Purpose	Description	Initiative	Implementation Year and Status
	predicative maintenance, mid-cycle outages, and strategic spares purchases).	Fleet: Outage Improvement Strategy: OU-02 Standard Equipment Reliability Program: ER-01 Pickering Equipment Reliability Plan: NFI-02 (Preventive Maintenance Program Improvement: ER-02	2010-In Progress 2010-Completed and Closed 2011-In Progress 2010-In Progress
	Impact: Improves WANO NPI, Forced Loss Rate, Unit Capability Factor, Chemistry Performance Indicator, Online Corrective and Deficient Maintenance Backlogs.		
Human Performance	Reduce human performance events through knowledge and training focus, work quality programs an enhanced observation and coaching.	Darlington: DN-H-05 (formerly Fleet Initiative OP-05)	2010-In Progress
		Pickering Maintenance Critical Work Quality: PNGS-H-02	2010-In Progress
	Impact: Improves Human Performance Error Rate, Unit Capability Factor, Forced Loss Rate		
Darlington Heat Transport Aging	Redesign of fuel bundle (37 Element Modified Fuel Bundle) to improve safety margins at Darlington in response to aging reactor components.	Reactor Safety Strategy: DN-R-07	2011-Complete
	Impact: Improves safety margins and reliability of plant (i.e. WANO NPI, Unit Capability Factor, Forced Loss Rate)		

Part B: Value for Money Initiatives

Purpose	Description	Initiative	Implementation Year and Status
Pickering A and Pickering B Amalgamation	Leverage best practices, and capitalize on economies of scale.	PNGS-V-01	2011 - Complete
Business Transformation Implementation	Adopt a matrix organization design with centre-led functions supporting operating business units. The centre-led functions are generally accountable for developing and maintaining functional excellence, setting standards, and providing cross-company services.	Matrix organization changes: NUC-01,02,03,06,07,08,18,21,27,28,31,33,35, and 37 (e.g. centralize: Engineering, Operations and Maintenance Support, Security and Emergency Services etc..). Engineering efficiencies through EPC NUC-04, NUC-10, NUC-15 Transform Corrective Action Program: NUC-08	Complete: NUC-06, 27, 29, and 35. Remaining: In Progress
Fleet Initiatives	Fleet approach to improving cost performance by reducing costs or increasing generation.	Engineering Value for Money- Implement changes to the site and corporate engineering organizations to better align with industry benchmarks on cost and organizational structure: EN-02 Days Based Maintenance - Eliminate current shift based maintenance: MA-08 Single Source Laundry Supplier-Implement Competitive Laundry Contract: MA-09 Work Management	2010- Closed. 2010: Pickering, Darlington - CNSC approval received; implementation in progress. 2010-Complete

Purpose	Description	Initiative	Implementation Year and Status
		Restructure-Reduction in number of Schedulers, Work Week Leaders and System Window Coordinators: WM-02	2012-Close and rolled into Business Transformation NUC 31
Site Initiatives	Site initiatives to improving cost performance by reducing costs or increasing generation.	<p>Pickering</p> <p>Lower Priority Work/Support Activities (Work Program Reprioritizing)-Support function review reductions, re-prioritizing and streamlining work to re-align staffing levels.</p> <p>Preventative Maintenance Revising of PM program to focus work on the right equipment at the optimum frequency: PNGS-V-WP2</p> <p>Reduction in Project Work-Head Count reduction pertaining to project work: PNGS-V-WP3</p> <p>Pickering Reliability Improvement Plan: NFI-02</p>	<p>2012-Business Transformation - In progress</p> <p>2013-In progress</p> <p>2012-Complete</p> <p>2013-In progress</p>
		<p>Darlington</p> <p>VBO advanced to 2015-Execute a SCO with the required scope and increase to extend frequency to 12 years while executing a VBO which provides significant financial benefit over the life of the station.</p> <p>DN-V-07</p> <p>Authorized Operations Staff Training Burden-Initiative to address lower than business</p>	<p>2012-In progress</p> <p>2012-In progress</p>

Purpose	Description	Initiative	Implementation Year and Status
		<p>plan authorized staff levels, training throughput and impact of Darlington Refurbishment authorized staff demand by improving training. DN-V-08</p> <p>Heat Transport System (HTS) Aging-On-going support to address degradation and impacts of HTS aging on components. DN-V-10</p>	2012-In progress
Inspection and Maintenance Services		<p>IMS Cost Estimate</p> <p>-ANDE CIGAR hybrid used in 2012 outage and built into all future planned outages.</p> <p>-Multiple Simultaneous Feeder Inspection (MUSIFI) project initiated to reduce feeder inspection window by 30% and has been incorporated into outage plans beginning in 2015.</p>	2012-In progress