D-2013-19190	2013/10/29	CLOSED	2769	T1301 further delays relating to D2O storage project	2013/10/29	N	2013/10/24	TRF-HWMB	TRF-HW	D2O storage project reports a high confidence date of Nov 28 to perform UPSW tie-ins. This is an additional push of 25 days. Previous date was Nov 4, and original date was Oct. 5th. This will impact TRF restart date. TRF Outage restart date was originally Dec 24, 2013 & then moved to Jan 14 and now possibly Feb 8 2014 to accommodate D2O storage projects failure to meet milestones / targets. There are also impacts to other work groups / projects that were scheduled to be performed in this time slot. IE: ABB (OEM) performing computer mod updates. B & W performing ACS project updates. Steam work as part of D1321WONGCW 2013/10/30 10:35 : The additional push to perform the D2O Storage Project UPSW tie-ins results in a 53-day delay from Oct 5th. The impact to the TRF restart date is Feb 24, 2014, not Feb 8. The Feb 24, 2014 date includes finding one week of efficiencies during the TRF outage to recover time.	Captured possible consequences of a delayed TRF restart. This will impact client services to all Ontario Candu units and may/will impact commitments with respect to VBO, & refurb tritium levels.	Perform a review of the D2O storage project and capture lessons learned to prevent further delays to the completion of this project & start of Refurb.	FORBECK, PERRY		D-OMCTRFM14	Wong, Thomas	Hamilton, Kenneth	B2	N	N	N	N	N	Hamilton, Kenneth					KENNEDYW 2013/10/30 10:07 : Evaluation Root Cause required. To Julian Reed, Darlington Design Projects		Cecconi, Luca	[redacted]PELT	N-PMPCCM	D-OMCTRFM14, N-PMPCCM	1/22/2014	1/22/2014	2014/01/22	Y	Kennedy, Rick		Service		BLACKMCDONAL	Y	Y	N	N	Y	2		11/27/2013	SVAROVSL 2013/10/31 11:00 - Repeat event search conducted by CAO = not a potential repeat event. STARKS 2013/10/31 11:09 - CARB Presentation Required. MATT3262 2013/11/27 14:26 : ED Manager changed with concurrence of both Managers; disposition date revised to reflect change of ownership.						What happened The original committed to milestone date of October 5, 2013 for the Low Pressure Service Water tie-ins was missed by the D2O Storage Project which resulted in a 2 month delay to the Tritium Removal Facility (TRF) Outage. How it happened The D2O Project was delayed pending OPG Board approval to proceed with Darlington Refurbishment, implementation of the Extended Services Master Service Agreement (ESMSA), and implementation of Engineering Procure and Construct (EPC) modification process. As a result the project got off to a late start and this was not flagged as a risk. The other main risks associated with being: -The first project for the refurbishment organization -The first major project to use the EPC process -The first project to use the ESMSA process were to be mitigated by the EPC process. Adverse conditions arising from these risks had to be corrected as this "pilot" project progressed. The refurbishment interfaces with the Station Operations and Contractor processes were not clarified and effective. Contractor expertise was not initially aligned with OPG methods and standards for modification design requirements (MDR) and schedule preparation. As a result Contractor developed MDR, and project schedule were not aligned with OPG standards to facilitate risk identification and milestone threats. This was due to failure of involving the right expertise at the right time to get detailed MDR's and a quality project construction schedule. As result further delays in the project occurred. See Attached Incident Investigation Report for further details.	Direct Cause: LPSW line re-route tasks were not on the TRF outage schedule. Root Cause (1): Failure of OPG to engage all stakeholders to ensure tasks are READY - no risk, per station schedule milestone processes. Contributing Cause (1): Failure of OPG to mitigate risk prior to affecting external milestones. Contributing Cause (2): Modification Design Requirements not sufficiently detailed. Contributing Cause (3): Late issuance of Purchase Order (PO) - 18 months following approval memo. Contributing Cause (4): Competing for station support See attached Incident Investigation Report	Extent of Condition: applicable to all projects including refurbishment which have an impact on milestones external to the project. Evaluation Organization Manager briefed the affected Project Managers on the results of this investigation to assist in recognizing and correcting similar issues. See attached Incident Investigation Report	See Attached Incident Investigation Report.	28163841				Initiator contacted for input.		Y	NA	Y
D-2013-18196	2013/10/22	CLOSED	2716	Project 16-31555 - Dewatering Line installed in path of Emergency Mitigating Route 3 documented in NK38-EMG-09813-EPG-02 Appendix B	2013/10/22	N	2013/10/20	Darlington N125 - Yard - Gate 3	0	During review of daily email for the D2O storage project for October 20, 2013 provided by the PM. It was noticed in a photo of current construction that the dewatering pipe for the project was running across road (between the EPS Fuel management building and EPG-2) and the ramp design that was supposed to be used by impacted was not installed as per DDC 123123 where the road was to be free of distructions. EMG-121 and EMG Pump transport Route 3 using the gate and road is documented in NK38-EMG-09813-EPG-02 Appendix B and it is not known how this present installation is acceptable during an emergency. The procedure states that this a path that could be used in an emergency but 'tribal knowledge' being used to say that the gate is never used to make decisions. This is a field execution issue not following accepted design.	Notified PM, and MTLs	- Follow design and install ramp. OR - Seek input from the EME department to determine if Route 3 can be considered no longer available, document decision and change design accordingly to go from ramp design to design of a pipe on the road.	DUTTA RAY, ANINDA		N-NRPED	Kar, Arun	BEAUDETTE, BLAKE	C3-NFE	N	N	N	N	N	BEAUDETTE, BLAKE	PASZKOWJ 2013/10/23 11:06 : The event is not reportable as either option to resolve the issue will follow the appropriate approval process.				MATHEWK 2013/10/30 08:20 : Cause known: Design Change process did not ensure design change process did not ensure that changes were appropriately verified, and did not follow the required approval process.	MATHEWK 2013/10/30 08:20 : Not significant by itself but has potential	Kar, Arun	ANIND[redacted] RAY [redacted]run Kar [redacted]	N-NRDEM	N-NRPED, N-NRDEM	11/14/2013	11/14/2013	2013/11/14	N			Service		PCMTECHNOLOGY-01	N	N	Y	N	Y	3		10/30/2013		CON-PWK-NR					See Condition Description	Design not properly implemented in th field	No Further Evaluation (NFE) performed	No Further Evaluation (NFE)	28161857				Initiator contacted for input.		Y	NA	Y
D-2012-08856	2012/09/07	CLOSED		Project #16-31555 D2O Storage: Lack of schedule from contractor	2012/09/07	N	2012/09/07		0	[redacted]	Informed line management. Assigned action to vendor to provide a schedule at weekly project meetings. Filed SCR.	Continued line management engagement on this issue, and higher level discussions with contractor management regarding their contractual obligation to provide a schedule and to disposition OPG comments. MAGEDESG 2012/09/07: Recommend B&M perform ACE and implement a corrective action plan. Darlington Design Projects to be the ED.	Marco Carias		N-PMDPDM	Malodesz, George	Malodesz, George	C3	N	N	N	N	N	Malodesz, George					Apparent Cause Evaluation required.		RAMESH SOLANKI	Jeff Mills, John Harpe	N-PMDPDM	N-PMDPDM - NucSup - Design Projects Darlington Manager N-PMBMDM - BLACK AND MCDONALD DARLINGTON MANAGER	10/8/2012	10/8/2012	10/9/2012		Mills, Jeff		Service		BLACKMCDONAL	N	N	Y	N	N			9/11/2012		CON-PI-KP - Contractor human performance issue CON-PI-SCHD - Contractor schedule issue					OPG comments on contractor's (B&M) first schedule for project#16-31555 were submitted to B&M on 01-Aug-201[redacted]	Consequences of this adverse condition: OPG Design Projects had to assign extra resources to the project to determine the cause of the schedule delays and inconsistencies. B+M's contractor team use of multiple schedule databases, understaffed Management team at project inception caused our adverse condition. It should be noted that this is the first large EPC contract awarded to B+M. This is a new , untested process for OPG and it's contractors. Interim action: B+M were increasing staff levels and arranging a project meeting review schedule with OPG to meet project demands at the time of this evaluation. SCR's closed out to this one: There are no SCR's closed out to this one.	Searched all 3 OPG data bases and COG website for OPEX using "lack of contractor schedule" and dates 05OCT10 to 05OCT12. No relevant SCR's were found with corrective actions that could have assisted in correcting our adverse condition.	Barrier Analysis was used for this evaluation. N-FORM-10134 attached. Primary failed barrier?Causal Factor CF-A Communications The programs and processes associated with corporate, divisional, and departmental communications were not effective in ensuring all critical information was transmitted and/or understood by the intended target audience.: -Content of communication was incomplete, ambiguous. -Communication strategy was incomplete or ineffective. - The message was not clear and concise. Secondary failed barrier?CF-G2 Personnel Assignment and Coordination Departmental resource planning processes did not ensure that personnel with the required qualifications were available to perform the tasks as scheduled. Work was not coordinated with the required resources from supporting work groups. The Apparent cause(s) are: B+M's contractor team is comprised of 3 companies. Each companies portion of the schedule was contained in a separate database. Amalgamating the schedules into one useable vehicle was cumbersome and time consuming. The B+M Management team was understaffed at the inception of the project. Human performance trend codes: FD-PARU-Reference Use procedure not used in accordance with established requirements. FD-SMO-Supervisor Oversight of Task and Schedule Adherence Personnel interviews: Conference calls with B+M Management, OPG Design Projects, OPG Performance improvement management. Documents / programs reviewed: B+M / OPG communications, B+M schedule databases	28147904								Y