

9/27/2013

FINAL

BUCKHORN STATION MATRIX

Estimated startup date: 10/7/2013

ITEM	SOURCE	ACTION	DATE DUE	DATE COMPLETED	COMMENTS
Ph I LOPA/PHA Action Item 1	Ph I LOPA/PHA	Implement 2 IPL solutions. Consider installing a relief valve around the receiver & launcher. Include flushing of dead leg when testing relief. Also, send status of relief to Tulsa controller.		2/25/2013	
Ph I LOPA/PHA Action Item 2	Ph I LOPA/PHA	TSV-1, 2, 4 & 5 are existing and adequate. Move TSV-3 to relieve around G3 valve to protect this segment.		3/15/2013	
Ph I LOPA/PHA Action Item 3	Ph I LOPA/PHA	Implement a 2 IPL solution. Consider using a check list to ensure all low points are adequately drained. Complete the check list at least every 30 days during the winter months and/or when a hard freeze is expected and add to PM schedule. Note: With a check list and PM schedule, 2 layers of protection is credible.	8/23/2013	9/16/2013	
Surge Analysis Action item 4	Phase I surge analysis	Add bypass relief valves around each inline control valve to mitigate secondary surges created when the station control valve closes due to the station discharge pressure being exceeded when a downstream valve is closed (surge event).		2/26/2013	
Ph II LOPA/PHA Action Item 1	Phase II LOPA/PHA	Implement a 2 IPL solution. Consider using a check list to ensure all low points are adequately drained. Complete the check list at least every 30 days during the winter months and/or when a hard freeze is expected and add to PM schedule. Note: With a check list and PM schedule, 2 layers of protection is credible.	8/23/2013	9/16/2013	
Ph II LOPA/PHA Action Item 2	Phase II LOPA/PHA	For LAHH-9000 with visible light and operator response to be credible, consider adding a step to the maintenance procedures to function test the Liquids Recovery Sump Tank (SU-9000) High High level alarm light on LAHH-9000 before draining. See Dwg: 194-D-101, Sht 5 of 6 (1 IPL)	8/23/2013	9/18/2013	
Ph II LOPA/PHA Action Item 3	Phase II LOPA/PHA	Consider revising the Receiver, Launcher, Strainer & Mainline Unit Maintenance Procedures and LOTO Check sheets to include technician's initials and final completion signature indicating all valves are placed in the proper position prior to lining up to the Mainline. Keep these completed procedures and LOTO checklist on file for one year. Have a CMS task for an audit of the completed procedures & LOTO checklists annually. Discard previous year's completed procedures and LOTO checklists after the audit. (1 IPL)	8/23/2013	9/26/2013	
Pre-Mod Approvals	MOCR BK-13-001	Pre-mod approvals for MOCR BK-13-001		4/3/2013 to 8/12/2013	
Operating procedure modifications	MOCR BK-13-001	Modifications required per MOCR BK-13-001		9/27/2013	
Facility Integrity Checklist	MOCR BK-13-001	PHA & LOPA performed in lieu of FIC		7/1/2013 to 8/31/2013	

PSSR	MOCR BK-13-001	PSSR required per MOCR BK-13-001		9/27/2013	
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