

Enclosure 3: Dominion Presentation
Meeting Summary of July 28, 2010
Public Meeting with NEI
Dated August 4, 2010



Dominion[®]

NEI 09-07 Pilot Program

North Anna Power Station

Region II

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NEI 09-07 Pilot Program North Anna Power Station

Implementation

- **Modified Previous Safety Culture Binning**
 - Started in 2008
 - Only looked at RCEs
 - Only used the Leadership Team
 - Informal
 - Biennial Safety Culture Assessment conducted with 4 SMEs
- **Formal Program**
 - Started in 3rd Quarter, 2009
 - Developed LI-NA-1002 (Rev. 2)
 - Expanded to the NEI 09-07 guidance
 - Results are reviewed by MSRC



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Safety Culture Assessment

- **71 question electronic survey provided to 1,099 site workers (included supplemental personnel)**
- **Survey was conducted 11/18/09 – 11/30/09**
- **70.15% response rate, resulted in 55,509 data points**
- **Results used to focus the interviews**



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Safety Culture Assessment

- **Site Assessment performed 12/14/09 – 12/19/09**
- **Team consisted of 21 members (11 from North Anna), as well as several observers**
- **62 interviews conducted, and 12 observations, resulted in 1,282 data points**
- **3 strengths, 0 weaknesses, 5 positive, 3 negative, and 7 general observations were made**
- **Results loaded into the Self Assessment module of the Corrective Action Program**



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Safety Culture Monitoring Panel

- **Consists of Supervisors and Specialists**
 - Operations
 - Engineering
 - Maintenance
 - RP/Chemistry
 - Corrective Action
 - Human Resources
 - ECP
 - HU Coordinator
- **Also has attendance by OR (organizational effectiveness) Manager and NS&L Director for consistency**



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Safety Culture Leadership Team

- **Consists of Senior Management**
 - Site Vice President
 - Plant Manager
 - NS&L Director
 - Engineering Director
 - OR Manager
 - Training Manager



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Data Analysis

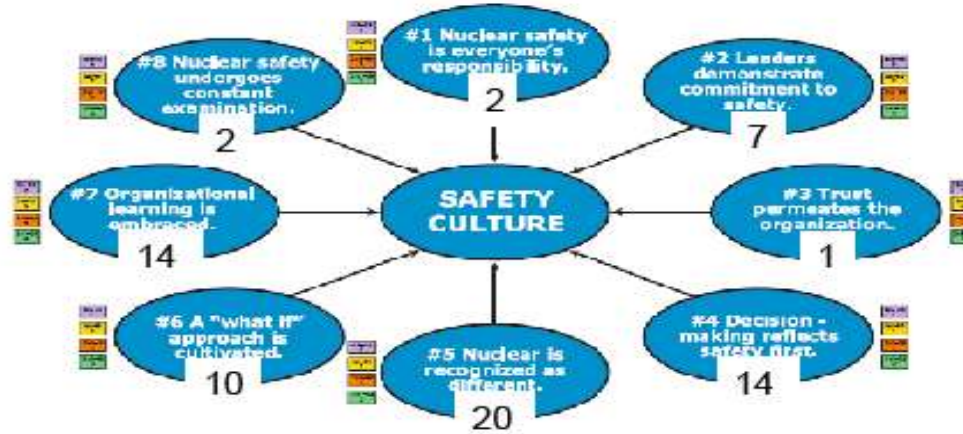
- **Used Guidance from NEI 09-07**
 - Monitoring Panel meets 1-2 times per Quarter
 - Leadership Team meets once per Quarter
 - Considered larger extent than previous binning
 - RCEs, NRC Violations and Findings, ACEs, Oversight AFIs and PDs, CAP and HU Trend Reports, INPO AFIs and PDs, OWAs, Margin Management Issues, HR and ECP Concerns/Trends, ODEC Concerns
 - 91 items considered in the current 4 quarters
 - 58 Items binned, 8 “doubled counted”, 33 items not binned
 - Bin to both INPO Safety Culture Codes and NRC Cross Cutting Aspects



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Results

Nuclear Safety Culture



2nd Quarter 2009	3rd Quarter 2009	4th Quarter 2009	1st Quarter 2010
<p>RCED00066 - Unit 1 Fuel Loader, #5 - Design and Operating margins not carefully guarded, special situation paid to Station product barriers.</p> <p>RCED00076 - 11E-25-EI Reactor Flare, #7 - Thermography not accurately used inside hatches to identify overheating electrical equipment.</p> <p>RCED00078 - "H" BIST Cable Failure, #7 - 2007 BICE did not go far enough.</p> <p>ACB017435 - MCR Chiller CO Pump did not meet original specs, #5 - Inadequate engineering program review of an HSE.</p> <p>ACB017466 - 1-DA-36 found open, #7 - Latest Organizational error - Operating procedure and Operator did not recognize the importance of the task.</p> <p>ACB017479 - Containment grant phase found occluded - programmatic and organizational issues, #6 - Engineering did not understand the technical aspects of the Containment Laser gaps.</p> <p>ACB017482 - UT Containment siphon activity needed stop work - hatches, #6 - Did not recognize that a shorter time to Head Lift could lead to other issues.</p> <p>ACB017499 - Individual lift under HP Turbine, #4 - Workers perceived the path to be safe.</p> <p>Overnight Issue: 08-002-N - OEBH Process not always followed, #2 - Deviations from the OEBH Process was allowed to increase.</p> <p>Overnight AFI 09-013-N - FME Workman, #5 - Special attention to FME not fully internalized by the staff.</p>	<p>ACE17404 - Worker cannot keep to full A open breaker - #6 - Workers did not consider word case scenario.</p> <p>ACE17528 - No technical guidance for 20 hole displays - #5 - Equipment not maintained consistently.</p> <p>ACE17518 - Main Feed In Valve Normal/Alarm Testing - #7 - Design margin not adequately guarded.</p> <p>ACE17605 - Control lock on LTSDG - #2 and #4 - Devices must reflect safety first regardless of production or financial challenges.</p> <p>ACE17621 - Control on Dependent Locking 1-DA-E-11 - #7 - Mistakenly well informed of lessons learned from sensitive adverse nature of accidents.</p> <p>ACE17583 - 3-FY-63-6 requires clarification - #6 - Did not understand use of PCB for alternate indicators.</p> <p>ACE17596 - Tank Qual Line for Cans - #5 & #7 - Tank qualification process to weak and does not adequately track goals.</p> <p>ACE17689 - 1-DY-76-NB control valve/line found in OEB - #4 - A firm's well practice choices for control of station equipment.</p> <p>ACE17773 - Negative Trend started in Power Design Factors Assessment - #6 & #7 - Positive Design Features not questioned or adequately maintained.</p> <p>ACE17706 - Shelving Dye class off Odeis - #7 - Compliance with vendor expertise.</p> <p>Overnight AFI 09-013-N - Operational Decision Making Process Improvement - #2 - Basis for operational decision not properly documented or communicated.</p>	<p>RCB00011 - Unit 1 Reactor Flare Heat Exchanger leak indicator ACB17311, #6 and #5 - BOP Valve leakage program did not consider Reactor Flare Station safety indicator system to full use and not used to indicate the operator's overall health in handling the heat for the Reactor Flare.</p> <p>RCB00011 - Unit 2 Reactor Flare Heat Exchanger ACB17311, #6 - Temperature of BOP Valve leakage not indicated by heat exchanger temperature of the BOP Valve, which caused the LRU to operate normally.</p> <p>RCB00011 - BOP Valve leakage program ACB17311, #6 - BOP Valve leakage program did not operate the design work station, resulting in a "group think".</p> <p>ACE17528 - 20 Hole Displays ACB17528 - The organization requires that the displays be used to indicate the status of the displays, which caused the LRU to operate normally.</p> <p>ACE17518 - Main Feed In Valve Normal/Alarm Testing ACB17518 - Design margin not adequately guarded.</p> <p>ACE17605 - Control lock on LTSDG ACB17605 - Devices must reflect safety first regardless of production or financial challenges.</p> <p>ACE17621 - Control on Dependent Locking 1-DA-E-11 ACB17621 - Mistakenly well informed of lessons learned from sensitive adverse nature of accidents.</p> <p>ACE17583 - 3-FY-63-6 requires clarification ACB17583 - Did not understand use of PCB for alternate indicators.</p> <p>ACE17596 - Tank Qual Line for Cans ACB17596 - Tank qualification process to weak and does not adequately track goals.</p> <p>ACE17689 - 1-DY-76-NB control valve/line found in OEB ACB17689 - A firm's well practice choices for control of station equipment.</p> <p>ACE17773 - Negative Trend started in Power Design Factors Assessment ACB17773 - Positive Design Features not questioned or adequately maintained.</p> <p>ACE17706 - Shelving Dye class off Odeis ACB17706 - Compliance with vendor expertise.</p> <p>Overnight AFI 09-013-N - Operational Decision Making Process Improvement ACB17706 - Basis for operational decision not properly documented or communicated.</p>	<p>ACE17993 - Worker entered HRA under license of EOP - #5 - Some prevention leads were not used to their fullest extent.</p> <p>ACE17999 - Sampling valve inspection - #4 - Ineffective communication of expectations for the violation procedural compliance.</p> <p>ACE18002 - Vendor Performer Maintenance without Maintenance Oversight - #7 - Work Control Process allowed lower readiness with Security standard oversight of security maintenance vs. Maintenance oversight of all maintenance.</p> <p>ACE18008 - 2R EDG Exhaust oil leakage causes unnecessary engine shutdown - #5 and #6 - Equipment is not correctly maintained and Organization maintains knowledgeable work force - should have known that a subtle EDG leak over time required.</p> <p>ACE18011 - 1-PC-81-A spent fuel pool transfer tube leakage - #7 - Individuals are well informed of underlying lessons learned from the laboratory.</p> <p>ACE18033 - Evacuation alarm for Unit Cell Room 1 high pressure CO2 - #6 and #5 - Individuals recognize the possibility of mistakes and want case scenarios and responses to be meticulously maintained.</p> <p>ACE18061 - Open condenser failed for 2-DR-82C-011-01-01 - #4 - Decision making reflects positive to allowable choices.</p> <p>ACE18078 - Four reactor switches Detail not in correct alignment, Shutdown Transition 85 - #5 - Plant activities are governed by high quality procedures.</p> <p>ACE18089 - Future maintenance for DC/DC fuel assemblies EPO & SW2 - #5 - Design and operating margins are carefully guarded.</p> <p>ACE18092 - 1E Reactor head outage and out-of-phase at 1E-14 - #4 - Decision making reflects positive to allowable choices.</p> <p>ACE18102 - Radiography area air (reactor head-outage inside RT boundary) - #2 and #6 - Supervisors are appropriate oversight of the significant activities and Personnel do not proceed in the face of uncertainty.</p> <p>NOI ARI 14-014-N - Vehicle Safety - #1 - Management places leadership in the field, and continues to reinforce standards. Operations flow requirements are properly controlled.</p> <p>NOI AFI 14-008,009,010-N - Shift Handoff Analysis - #1 - The organization avoids complacency and cultivates a continuous learning environment.</p>



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Results

Area	Components	Aspects	4th Qtr 2008	1st Qtr 2009	2nd Qtr 2009	3rd Qtr 2009	4th Qtr 2009	1st Qtr 2010	Running 4 Quarter Total	
Human Performance	1. Decision Making	a. Safety/Risk Significant Decisions	1		1	1	1	1	4	
		b. Conservative Assumptions & Safe Actions		1	1	1	5	1	8	
		c. Communications of Decisions				1			1	
	2. Resources	a. Proper Maintenance Programs				1	1		2	4
		b. Personnel Training & Qualifications				1			1	
		c. Complete Documentation & Labeling	1		1	1	2	1	5	
		d. Proper Facilities & Equipment								
	3. Work Control	a. Proper Work Planning	1				2		2	
		b. Work Activity Coordination		1				1	1	2
	4. Work Practices	a. Human Performance & Error Prevention		1		1	3	1	5	
		b. Procedural Compliance		2	1	1	3	3	8	
		c. Supervisory & Management Oversight	1	1	1	1		1	3	
PI & R	1. Corrective Actions Program (CAP)	a. Proper Issue Identification					1		1	
		b. Trend Performance Using CAP								
		c. Thorough Evaluation of Identified Problems			1	2	1		4	
		d. Appropriate Timely Corrective Actions (CA)		1				2	2	
		e. Appropriate Timely Alternative CAP Process								
	2. Operating Experience	a. Utilizing Operating Experiences					1		1	
		b. Implementing Operating Experience		1	1		1	2	4	
	3. Self & Independent Assessment	a. Appropriate Self-Assessment					1		1	
		b. Track and Trend Safety Indicators								
		c. Coordinates & Communicates Results								
SCWE	1. Environment for Raising Concerns	a. Free Flow of Information								
		b. Alternative Free Flow								
	2. Preventing, Detecting, and Mitigating Perceptions of Retaliation	a. Personnel Are Free to Raise Safety Concerns								
		b. Discrimination Claims Investigated & CA Taken								
		c. Appropriate Disciplinary Actions Taken								
OTHER	1. Accountability	Defined lines of authority and responsibility		3	2		1	1	4	
	2. Continuous Learning Environment	Licensee ensures that a learning environment exists		3	2		1		3	
		Systematic Process for change is used					2		2	
	4. Safety Policies	a. Policies reinforce the right to raise concerns								
		b. Personnel are effectively trained on safety policies								
		c. Actions are consistent with safety policies		1				1	1	
		d. policies are periodically communicated								



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Results

- **Provided Training, and other actions;**
 - Results tracked by PIIIs or CAP
 - Davis-Besse and Strategic and Action Planning leadership training
 - Managing Risk and Proceeding in the Face of Uncertainty leadership training
 - QVV (Question, Validate, Verify) leadership training
 - Change Management (Who, What, When) leadership training
 - Importance of adhering to nuclear standards and personal accountability leadership training
 - Collective significance review of items binned under INPO principle #7, (Organizational Learning is Embraced)
 - Passive Design Features training for the entire staff



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Learnings

- Only half of the items cleanly “bin” into either the INPO Principles or the Cross Cuttings Aspects
- The other half are very subjective, and can easily fit into multiple categories based perspective
- Leadership Team tends to be more critical than the Monitoring Panel
- Most actions are training directed at behaviors, not changes to processes or procedures (CAP already addresses these)
- Biennial Safety Culture Assessment results are different than and complement the results of the binning
- About 20-30 “bins” appear to be manageable and meaningful, 8 is too few, 71 is too many for the quarterly binning

Questions?