



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

May 23, 2014

LICENSEE: Omaha Public Power District (OPPD)

FACILITY: Fort Calhoun Station

SUBJECT: SUMMARY OF MAY 13, 2014 MEETING WITH OMAHA PUBLIC
POWER DISTRICT

On May 13, 2014, a Category 1 meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and Omaha Public Power District (OPPD), at the Omaha Marriott located at 10220 Regency Circle, Omaha, Nebraska.

The NRC presented the status of Inspection Manual Chapter 0350 oversight activities at Fort Calhoun Station, and the Omaha Public Power District presented details of their actions for continued performance improvement following the plant restart in December, 2013. The slide presentations are available electronically from the NRC's Agency wide Documents Access and Management System (ADAMS) and are enclosed in this notice. A video of the public meeting will be posted on the web site devoted to the special oversight at Fort Calhoun Station, available at: <http://www.nrc.gov/info-finder/reactor/fcs/special-oversight.html>.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agency wide Documents Access and Management System (ADAMS). ADAMS is accessible from the Public Electronic Reading Room page of the NRC's public web site at: <http://www.nrc.gov/reading-rm/adams.html>.

CONTACT: Michael Hay, RIV/DRP
(817) 200-1147

Docket No.: 50-285

Enclosure 1:
NRC Presentation Slides
Enclosure 2:
OPPD Presentation Slides



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DISTRIBUTION:
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DOCUMENT NAME: R:_REACTORS\FCS\2014\FCS MS 05132014.pdf

ADAMS ACCESSION NUMBER: ML14143A289

<input checked="" type="checkbox"/> SUNSI Review By: MCH		ADAMS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive	Keyword: SUNSI REV Compl.
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ACES (R4ACES@nrc.gov)

Fort Calhoun Station Public Meeting

Nuclear Regulatory Commission
May 13, 2014
Omaha, Nebraska

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Introductions

- Welcome
- Introduction of NRC personnel

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Purpose of Meeting

- NRC will present status of regulatory activities associated with the Fort Calhoun Station
- OPPD will present details of Fort Calhoun Station performance improvement initiatives
- Public comments and questions

Opening Remarks

- Tony Vegel, Director, Division of Reactor Safety
 - Chair, Fort Calhoun Station Oversight Panel
- Louise Lund, Deputy Director, Division of Operating Reactor Licensing
 - Vice Chair, Fort Calhoun Station Oversight Panel

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Post-Restart CAL

OPPD committed to the NRC to continue implementing improvement initiatives in key areas and address specific technical items

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NRC Actions Completed

- NRC issued Post-Restart Confirmatory Action Letter December 17, 2013
 - Key areas for sustained performance improvement
 - Human Performance
 - Safety Culture
 - Corrective Action Process
 - Design Basis Reconstitution

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NRC Assessment Activities

- Routine inspections
 - Resident Inspectors
 - Regional inspections
- Team inspection (Summer 2014)
 - Assess Corrective Action Process effectiveness
 - Assess Post-Restart Confirmatory Action Letter items

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In Summary

- Increased NRC oversight activities remain
- NRC continues to implement independent and thorough inspection activities to assess station performance improvement progress

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OPPD Presentation

Lou Cortopassi
Site Vice-President / Chief Nuclear Officer
Omaha Public Power District

Contacting the NRC

- Report an emergency
 - (301) 816-5100 (call collect)
- Report a safety concern
 - (800) 695-7403
 - Allegation@nrc.gov
- General information or questions
 - www.nrc.gov



OPPD's Fort Calhoun Station Driving To Excellence

Public meeting with the U.S. Nuclear Regulatory Commission

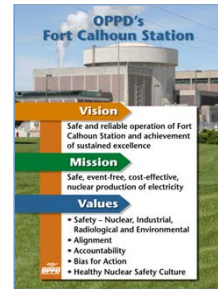


May 13, 2014



Topics for Discussion

- Plant Status
- Problem Identification and Resolution
- Engineering Products
- Design and Licensing Basis Control and Use
- Containment Internal Structures
- Site Operational Focus
- Integration
- Nuclear Oversight
- Closing Remarks



Plant Status

Sitewide Industrial Safety

Injury Comparison Summary	2013	2014
Untreated Injuries:	11	3
First Aid Injuries:	15	0
Occupational Safety and Health Administration (OSHA) Recordable:	4	0
Lost-Time / Restricted:	4	0



Plant Status

Sitewide Human Performance

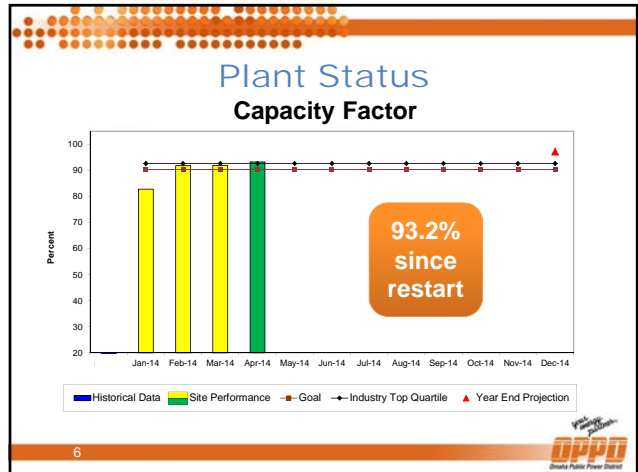
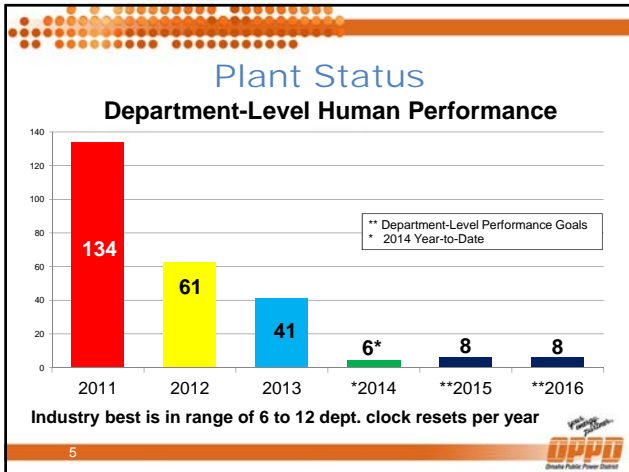
2014 Sitewide Clock Reset:



March 17: Stator water cooling leak caused an automatic trip of the unit

Industry best is in the range of 0 to 2 sitewide clock resets per year





Plant Status

Operational Challenges

- Shut down due to maintenance evolution on stator water system
- Down power due to VA-46 Control Room Air Conditioning Units

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Problem Identification and Resolution

- Corrective Action Program (CAP) changes implemented to improve OPPD's detection and correction of plant issues
 - Provide an updated status of actions and effectiveness reviews
- Results
 - Focused area self-assessment insights
 - Performance indicators insights
 - Trending insights
 - Areas providing challenges and actions to address

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Engineering Products

- Observations and trends for:
 - Corrective Action Products
 - Quality of Engineering Products
 - Operability Evaluations
 - Reportability Determinations

OPPD's Fort Calhoun Station

Vision
Safe and reliable operation of Fort Calhoun Station and achievement of sustained excellence

Mission
Safe, event-free, cost-effective, nuclear production of electricity

Values

- Safety - Nuclear, Industrial, Radiological and Environmental
- Alignment
- Accountability
- Bias for Action
- Healthy Nuclear Safety Culture

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Engineering CAP Health: March 2013 - March 2014 Comparison

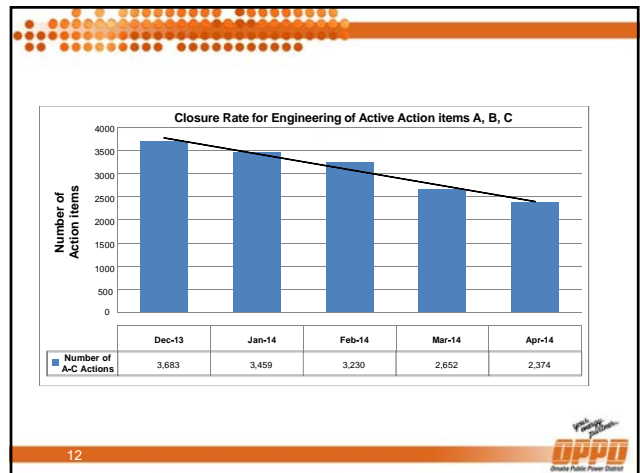
		Engineering March 2013	Engineering March 2014
Coding and Analysis (trending)	Event Code Backlog (1 month)		
	Number of CRs Coded with Adverse Trend (1 month)		
	Cause Code Backlog (1 month)	1	0
Overall	Number of Significant Events (1 year)		
Identification and Screening Meetings	Number of CRs Identified (1 month)	392	124
	3 Month Engagement Ratio	65%	66%
	Self-Identification Ratio - Level 1,2,3 CRs (1 month)	42%	74%
Analysis	Number of CAP Meeting Observations (1 month)	4	0
	Number of Repeat Events (1 year)	1	0
	Number of Ineffective Effective Reviews for Root Causes Only (1 month)	0	0
	DCARB RCA Rejection Rate (3 month avg.)	0%	0%
	DCARB ACA (Tier 1) Rejection Rate (3 month avg.)	29%	20%
	DCARB ACA (Tier 2) Rejection Rate (3 month avg.)	58%	13%
	RCA Rejection Rate (3 month avg.)	57%	0%
	ACA (Tier 1) Rejection Rate (3 month avg.)	0%	0%
	DCARB CR Closure Rejection Rate (3 month avg.)	30%	15%
	MRC CR Closure Rejection Rate (3 month avg.)	50%	25%

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Engineering CAP Health: March 2013 - March 2014 Comparison

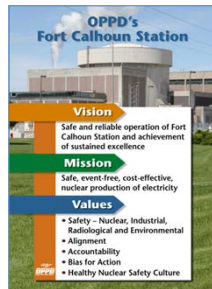
		Engineering March 2013	Engineering March 2014
Timeliness	Overdue Priorities (1 month)	47	7
	Number of Overdue Non-ACA and Non-RCAREs (1 month)	9	0
	Number of Overdue Corrective Actions (3 month total)	9	7
	Number of Overdue Simple Causes (1 month)	8	0
	Average Time to Perform RCAs (12 month avg.)	151	83
	Average Time to Perform Tier 1 ACAs (1 month avg.)	252	380
	Average Time to Perform Tier 2 ACAs (1 month)	241	68
	Average Time to Perform Simple Causes (1 month)	15	15
	Median Age of Open Non-Outage AIs (days) (1 month)	965	1,148
	Number of Open Non-Outage AIs > 365 days (1 month)	212	733
	Oldest Open Non-Outage AI (days) (1 month)	1,930	2,294
	Number of Open Outage-Related AIs (1 month)	261	124
	Number of Open CAPR's (1 month)	26	15
	Number of Open CA's (1 month)	1,785	1,270
	Number of Open RE's (1 month)	465	144
	Median Age of Open RA's (days) (1 month)	774	956
	Number of Open RA's > 365 days (1 month)	320	321
CRs in Ready to Close (1 month)	917	497	

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Engineering Products

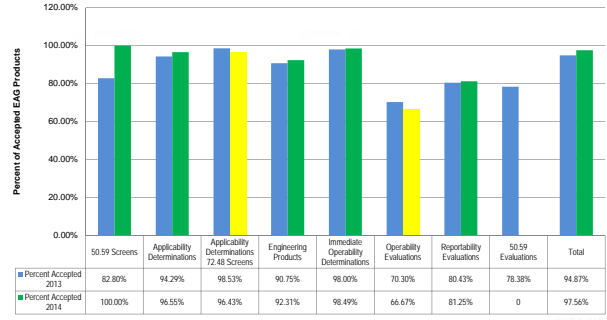
- Observations and trends for:
 - Corrective Action Products
 - **Quality of Engineering Products**
 - **Operability Evaluations**
 - **Reportability Determinations**



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Engineering Assurance Group Products 2013-2014 Comparison



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Design and Licensing Basis Control and Use

- OPPD's post-restart commitment states:
 - After restart, OPPD will complete a significant effort to perform a risk-focused reconstitution of the:
 - Design basis,
 - Licensing basis, and
 - Updated Safety Analysis Report
 - As part of this project, OPPD will:
 - Ensure proper classification of equipment,
 - Convert to a safety-related "Q List" approach for equipment classification, and
 - Complete a key calculation review
 - A pilot program will be completed during 2014 on a selected system to "check & adjust" the process, scheduling and resource allocation
 - Complete the reconstitution project before the end of the 4th quarter, 2018

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Design and Licensing Basis Control and Use

- Project Activities Completed or In Progress
 - **January 2014** – Commenced drafting project request for proposal (COMPLETE)
 - **February 7, 2014** – Issue project request for proposal to vendors (COMPLETE)
 - **March 28, 2014** – Vendor proposals due (COMPLETE)
 - **April 30, 2014** – Award project contract (COMPLETE)
 - **May 5, 2014** – Commence project (COMPLETE)
 - **January 2014:** Commenced review of key calculations
 - Pre-restart 93 calculations were reviewed, with 45 revisions recommended
 - 330 of 382 key calculations have been reviewed with 147 revisions recommended
 - Calculation issues identified to date have been determined to be not consequential, but calculations must be brought up to today's standards

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Design and Licensing Basis Control and Use

- Project Activities to be Completed
 - **June 30, 2014** – Complete Phase 1 (Develop project processes/procedures)
 - **December 31, 2014** – Complete Phase 2 (Pilot program – NRC commitment)
 - **February 1, 2015** – Complete project status assessment
 - Approximately every six months between Feb. 1, 2015, and Dec. 31, 2018 – Perform project status assessments
 - **February 28, 2015** – Complete Phase 3 (Incorporate lessons learned from pilot program)
 - **December 31, 2018** – Complete Phase 4 (Complete reconstitution project – NRC commitment)
 - **February 1, 2019** – Complete project final effectiveness review

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Design and Licensing Basis Control and Use

- Project Oversight
 - Oversight to be provided as follows:
 - OPPD project manager who is independent of the production work
 - OPPD/Exelon senior management
 - Periodic project status assessments
 - Independent project oversight board
 - FCS Nuclear Oversight Department
 - Nuclear Safety Review Board

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Containment Internal Structures

- OPPD committed to:
 - Evaluate the structural design margin for the containment internal structure, and reactor cavity and compartments, and resolve any deficiencies in accordance with FCS's CAP
 - Regarding Beams 22A and Beam 22B under Safety Injection Tanks 6B/D, resolve any deficiencies in accordance with the CAP
 - Resolve and correct any deficiencies surrounding the reactor vessel head stand (RVHS) prior to its next use

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Containment Internal Structures

- Resolution strategy for 2015 refueling outage
 - Install columns in the basement of the containment building under floor Beams 22A and Beam 22B to reduce the loading on the two floor beams
 - Replace the existing RVHS pedestal supports with a structural steel box frame that spans the floor and transfers the loads to adjacent walls and columns
 - Preliminary design will be complete by third quarter 2014

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Site Operational Focus

Procedures

- Procedure focus
 - Quality
 - Use and Adherence
 - Level of Detail
- Cornerstone for performance
 - Emergency and Abnormal Operations
 - Demonstrated using simulator
 - Upgrades continue
 - Normal Operations
 - Support plant operations
 - Require verbatim compliance
 - Administrative
 - Station-wide effort



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The Exelon Nuclear Management Model Integration status

- More than 4,000 tasks completed
 - Design Review Board
 - Human Performance Fundamentals
 - Nuclear Oversight Processes
 - Learning Programs
 - Operations Standards and Expectations
- Approximately 8,000 tasks remain, with 6,000 of these scheduled for completion in 2014
 - Weekly integration status meetings to review schedule adherence
- Lessons Learned
 - Data Sharing
 - Gap Analysis

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Nuclear Oversight Independent Assessment

Plant Observations and Performance

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Flooding Recovery Action Plans

- Five Flooding Recovery Post-Restart Action commitments outlined in Section 2 of the Confirmatory Action Letter (CAL)
- Three of the Section 2 Flooding Recovery Post-Restart Action commitments have been submitted to the NRC resident inspectors
 - **Item 4.4.3.1** – Gather flood response lessons learned through condition report reviews to determine if procedure or strategy changes should be implemented (**completed December 12, 2012**)
 - **Item 4.4.3.3** – Implement procedure and strategy changes as indicated by the lessons learned review conducted (**completed February 20, 2013**)
 - **Item 1.2.3.21** – Inspect tank and equipment on demineralized water tank for damage (**completed February 10, 2014**)
- Two of the Section 2 Flooding Recovery Post-Restart Action commitments are scheduled
 - **Item 4.4.3.2** – Review flood design basis and determine if the 2011 flood event provides additional information that should drive design basis changes
 - **Item 1.2.3.82** – Perform independent spent fuel storage installation route load test

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Fukushima Response Project

- Project scope
 - Flooding reevaluation and seismic evaluation
 - Flooding and seismic walkdowns
 - Results submitted to the NRC
 - Actions ongoing
 - Mitigating strategies for beyond design basis external events
 - Strategy developed and submitted to NRC
 - Portable equipment pre-staged at FCS
 - Procedures (Admin/Operations/PM/Testing)
 - Staffing
 - Communications (internal and external)
 - Spent Fuel Pool Instrumentation (SFPI)
 - SFPI modifications submitted to the NRC

Portable
Submersible
Pumps

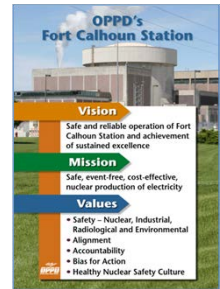


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Closing Remarks

- Plant Status
- Problem Identification and Resolution
- Engineering Products
- Design and Licensing Basis Control and Use
- Containment Internal Structures
- Site Operational Focus
- Integration
- Nuclear Oversight
- Closing Remarks



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