



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BLVD
ARLINGTON, TEXAS 76011-4511

December 3, 2012

LICENSEE: Omaha Public Power District (OPPD)
FACILITY: Fort Calhoun Station
SUBJECT: SUMMARY OF NOVEMBER 15, 2012, MEETING WITH OMAHA
PUBLIC POWER DISTRICT

On November 15, 2012, a Category 1 meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and Omaha Public Power District (OPPD) at The Dana College Gardner-Hawks Center (gymnasium), 2848 College Drive, Blair, Nebraska.

The NRC presented an update of issues and oversight activities at Fort Calhoun Station. Additionally, the NRC provided details regarding the Restart Checklist Basis document. A copy of the presentation is enclosed (Enclosure 1). OPPD presented details of plant status, ongoing work and restart commitments, and independent oversight activities (Enclosure 2).

A video of the public meeting, and responses to the questions directed to the NRC, will be posted on the website 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/readingrm/adams.html>.

To receive a summary of future meetings and other plant-specific e-mail distributions, you must subscribe to the Operating Reactor Correspondence electronic distribution for this plant via <http://www.nrc.gov/public-involve/listserver/plants-by-region.html>. Once subscribed, if you wish to discontinue receiving electronic distribution, you may unsubscribe at any time by visiting the same web address above.

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Docket No.: 50-285

Enclosure 1: NRC Presentation slides
Enclosure 2: OPPD Presentation slides

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ADAMS: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete	Reviewer Initials: CS	
	<input checked="" type="checkbox"/> Publicly Available	<input checked="" type="checkbox"/> Non-Sensitive	
Category A.	<input type="checkbox"/> Non-publicly Available	<input type="checkbox"/> Sensitive	
KEYWORD: 0350 FCS			
RIV:BC:DRP/F	PAO	SLO	D:DRP
MHay	VDricks	WMaier	KKennedy
/RA/	/RA/	/RA/	/RA/
11/28/12	11/29/12	11/30/12	11/30/12

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Fort Calhoun Station Public Meeting

Nuclear Regulatory Commission
November 15, 2012
Blair, Nebraska

Opening and Introductions

- Welcome
- Introduction of NRC personnel

Purpose

- Status of NRC and OPPD actions
 - NRC will present status of inspections and issuance of basis document
 - OPPD will present details of plant flood recovery actions
- Allow for public interaction and questions

NRC Inspections

- Ongoing Inspections
 - Permanent local-based resident inspectors
 - Inspections by other NRC Specialists
- Future Inspections

Basis Document

- Overview of Basis Document
 - Follows CAL Restart Checklist Structure
 - Provides Detailed Scope of Inspection Items
 - Living Document
 - Available for Public Review
 - <http://www.nrc.gov/info-finder/reactor/fcs/special-oversight.html>

RESTART CHECKLIST

Item Number	Description	Closure Date
Causes of Significant Performance Deficiencies and Assessment of Organizational Effectiveness		
1		
1.a	Flooding Issue – Yellow finding	
1.b	Reactor Protection System contact failure – White finding	
1.c	Electrical bus modification and maintenance – Red finding	
1.d	Security – Greater than green findings	
1.e	Third-Party Safety Culture Assessment	
1.f	Integrated Organizational Effectiveness	
Flood Restoration and Adequacy of Structures, Systems, and Components		
2		
2.a	Flood Recovery Plan actions associated with facility and system restoration	
2.b	System readiness from extended shutdown	

Basis Document

Section 1: Causes of Significant Performance Deficiencies and Assessment of Organizational Effectiveness

Item 1.a Flooding Issue – Yellow Finding

Item	Actions to be Verified Prior to Restart	Status
1.a.1	Flooding Yellow Finding root and contributing cause evaluation	
1.a.2	Flooding Yellow Finding extent of condition and cause evaluation	
1.a.3	Flooding Yellow Finding corrective actions addressing root and contributing causes	

Action Item Number	Actions to be Verified Prior to Restart	Status
4.2.1.1	Review / observe all external flood barrier configurations and verify that they have not been altered during flood response or outage activities	
4.2.1.2	Issue SO-G-124, Flood Barrier Impairment program.	
4.2.1.3	Document external flood barrier impairments as applicable in accordance with SO-G-124	
4.2.1.6	Identify flood barriers which will not have adequate qualification basis before leaving Cold Shutdown.	



Basis Document

Item	Description	Status
LER 2012-001-0	Inadequate Flooding Protection Procedure	
LER 2012-019-0	Traveling Screen Sluice Gates Found with Dual Indication	
LER 2011-003-3	Inadequate Flooding Protection Due to Ineffective Oversight	
LER 2011-001-0	Inadequate Flooding Protection Due to Ineffective Oversight	
VIO 2012002-01	Inadequate Procedures to Mitigate a Design Basis Flood Event	
VIO 2012002-02	Failure to Classify Intake Structure Sluice Gates as Safety Class III	
VIO 2012002-03	Failure to Meet Design Basis Requirements for Design Basis Flood Event	
VIO 2010007-01	Failure to Maintain External Flood Procedures	



Basis Document

Section 2: Flood Restoration and Adequacy of Structures, Systems, and Components

Item 2.a Flood Recovery Plan Actions Associated with Facility and System Restoration

Action Item Number	Actions to be Verified Prior to Restart	Status
1.2.1.1	Determine if equipment in the intake structure and cells has been damaged	
1.2.1.4	Return B 5. b materials to proper location	
1.4.1.2	Inspect 13.8kV underground pad mount T&D switch SW1062	Closed IR 2012-003 ML12226A630
1.4.1.3	Inspect and/or test T&D 13.8 kV transformer T1B-3C-1 (T&D 13TN43G)	Closed IR 2012-003 ML12226A630
1.4.1.4	Inspect manholes and ducts for MH01 through MH04 from T&D switch SW1062 to transformer T1B-3C-1 to facilitate pulling new 110 cable	Closed IR 2012-003 ML12226A630
1.4.1.5	Inspect ducts associated with manholes MH1 through MH4 between T&D switch SW1062 to T&D transformer 13TN43G and repair as necessary	Closed IR 2012-003 ML12226A630



Basis Document

Action Item Number	Actions to be Verified Prior to Restart	Status
2.2.1.1	Assess the effects of the flood on the Auxiliary Cooling System (ACS) and identify actions to restore the system.	
2.2.1.2	Assess the effects of the flood on the Auxiliary Feedwater System (AFW) and identify actions to restore the system.	
2.2.1.3	Assess the effects of the flood on the Auxiliary Instrumentation System (AIS) and identify actions to restore the system.	
2.2.1.4	Assess the effects of the flood on the Control Rod Drive System (CRD) and identify actions to restore the system.	
2.2.1.6	Assess the effects of the flood on the Chemical and Volume Control System (CVC) and identify actions to restore the system.	
2.2.1.6	Assess the effects of the flood on the Circulating Water System (CWS) and identify actions to restore the system.	
2.2.1.7	Assess the effects of the flood on the Emergency Core Cooling System (ECC) and identify actions to restore the system.	



Current Status

- Comprehensive and Detailed Inspection Strategy Developed
- Performing Focused Inspections
 - Flood and Fire Recovery Actions
 - Performance Improvement Activities
 - Containment Penetrations and Internal Structure Issues



Current Status

- Currently No Restart Checklist Items are Fully Completed by the Licensee and Ready for Final NRC Review



Path Forward

PERFORM THOROUGH and INDEPENDENT VERIFICATION of PLANT SAFETY

OPPD Presentation

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



NRC Remarks

Closing Remarks

Open discussion

Open to the public

- The NRC places a high priority on keeping the public and stakeholders informed of its activities
- At www.nrc.gov, you can:
 - Find public meeting dates and transcripts;
 - Read NRC testimony, speeches, press releases, and policy decisions;
 - Access the agency's Electronic Reading Room to find NRC publications and documents; and
 - Subscribe to automatically receive correspondence from the NRC

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

Driving Through Restart

Public Meeting with the U.S. Nuclear Regulatory Commission



November 15, 2012

1



Topics for Discussion

- Plant Status – Fixing the Plant
- Progress on Commitments for Restart
- Restart Decision-Making
- Plan for Sustained Improvement
- Independent Assessment
- Closing Remarks

Fort Calhoun Station

Vision

Safe and efficient restart of Fort Calhoun Station and achievement of sustained excellence

Mission

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

Values

- Safety – Nuclear, Industrial, Radiological, & Environmental
- Alignment
- Accountability
- Bias for Action
- Strong Nuclear Safety Culture

2



Plant Status



- Safety Performance
- Human Performance
- Fixing the Plant

3



Industrial Safety Overview

Injury Comparison Summary

	2011	2012
Untreated Injuries:	23	18
First Aid Injuries:	22	5
OSHA Recordable:	21	1
Lost Time/Restricted:	1	0

2012 data January 1st to November 14th

4



Human Performance Overview

Human Performance Summary

	2011	2012
Station-level issues	9	1
Department-level issues	134	45

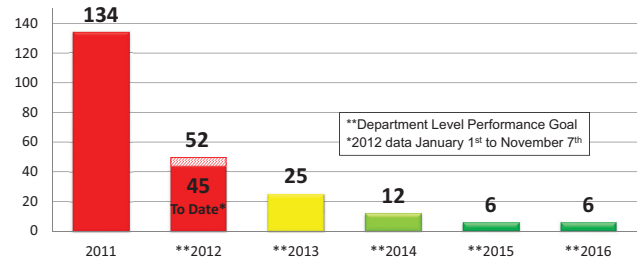
2012 data January 1st to November 14th

5



Human Performance Goals

Department Level Performance Issues What Does "Excellence" Look Like?



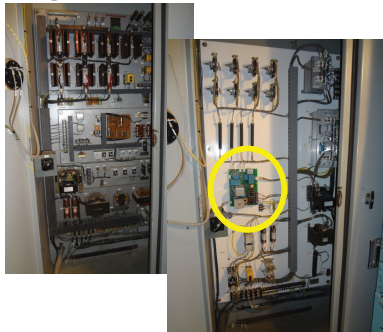
Industry Best is in the Range of 6 to 12 per year

6



Fixing the Plant

Emergency Diesel
Generator No. 1
Voltage Regulator
Work Complete



7



Fixing the Plant

480 Volt AC Train A
Bus Maintenance
Complete



8



Continued Progress



- Station Priorities
 - Safety
 - Human Performance
 - Fix the Plant
 - Corrective Action Program
- Human Behavior Continues to Improve
- We are Fixing the Plant
- Remaining Work is Known

9



OPPD Commitments for Restart

1. Identify causes and implement corrective actions for safety significant findings (Checklist 1.a through 1.d)
2. Assess safety culture and organizational effectiveness and implement improvement actions (Checklist 1.e and 1.f)
3. Assess and resolve flooding impact, evaluate systems, and ensure plant is ready for restart (Checklist 2.a and 2.b)
4. Assess and improve programs and processes that caused significant performance decline (Checklist 3.a through 3.f)
5. Implement the Integrated Performance Improvement Plan (Checklist 4)
6. Submit Fort Calhoun Station Restart Report

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CAL Commitment No. 1

Commitment 1

Progress on Addressing Safety Findings

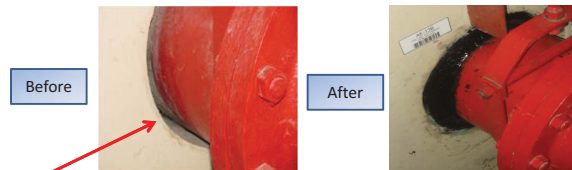
	Scoping	Discovery	Analysis	Implementation
1.a. Flooding	100%	100%	100%	75%
1.b. Reactor Prot. Sys. Contactor Failure	100%	100%	75%	75%
1.c. Electrical Bus Modification & Maintenance	100%	100%	100%	75%
1.d. Security Issue	100%	100%	90%	75%

11



1.a. Flooding Issue

- Completed Scoping, Discovery and Analysis
- Completed Root Cause Analyses
- Key Corrective Actions Completed
 - Replacement of Certain Flood Barriers
 - Inspection of All Conduit/Piping Seals
 - Improved Flood Procedures



12



1.a. Flooding Issue – Cont’d

- Completing Remaining Corrective Actions
 - Intake Cell Level Control Modification
 - Fire Barrier Certification for Flood Resistance
 - Phase A: Confirmed Static Pressure Resistance
 - Phase B: 30-Day Leakage Test Ongoing
- Restart Checklist Closure Package Ready for Inspection – November 30



Commitment 2

Progress on Safety Culture and Organizational Effectiveness

	Scoping	Discovery	Analysis	Implementation
1.e. Safety Culture	100%	100%	100%	93%
1.f. Organizational Effectiveness	100%	100%	100%	89%



1.e. Safety Culture

- Independent and Internal Assessments Identified Areas for Improvement
 - Develop and Communicate Strategic Vision, Governance and Oversight – Complete
 - Enhance Leadership Behaviors – Ongoing
 - Engage Workforce in Decisions Based on Vision – Ongoing
 - Improve Corrective Action Program – Ongoing
 - Encourage Questioning Attitude and Challenging of Decisions – Ongoing
 - Improve Accountability - Ongoing



1.e. Safety Culture – Cont’d Improvement Actions

- Developed, Communicated and Aligned on Strategic Plan; Vision, Mission, and Values; and Performance Management and Accountability Process
- Bi-Weekly Employee 2Cs Meetings
- Daily Leaders and Weekly Staff Alignment Meetings
- Differing Professional Opinion Process Established
- Safety Conscious Work Environment Training for Supervisors Complete and Ongoing for Employees – Complete in December
- Re-Assessment Completed in October



1.e. Safety Culture – Cont'd

- Elements of Safety Culture Metric
 - Safety Conscious Work Environment Index
 - Nuclear Safety Culture Principals Index
 - Engaged Thinking Organization Index (INPO SOER 10-02)
 - Employee Engagement Index
 - INPO Organizational Culture Index
- Metric Monitored Monthly – Input from Pulse Surveys



1.e. Safety Culture – Cont'd Safety Culture Monitoring Results

Safety Conscious Work Environment Index Improving

- Management Takes Concerns Seriously
- Culture Conducive to Raising Concerns
- Awareness and Willingness to Use ECP
- Comfortable Escalating Concerns

Nuclear Safety Culture Principles Index Improving

- Supervisors Reinforcing use of Human Performance Tools
- Staff Encouraged to Bring Problems Forward
- Supervisors Reinforcing use of Operating Experience



1.e. Safety Culture – Cont'd Safety Culture Monitoring Results

- Management Focus Areas
 - Managing Distractions
 - Inter-Department Communications
 - Coordinating Issues Between Work Groups
 - Employee Concerns Program Confidentiality



Commitment 3 Progress on Systems Ready for Restart

	Scoping	Discovery	Analysis	Implementation
2.a. Flood Recovery Restoration Actions	100%	100%	100%	91%
2.b.1. System Health Reviews	100%	70%	50%	10%
2.b.2. Reactor Safety Strategic Performance Area Review	100%	100%	100%	50%



Commitment 3

Progress on Systems Ready for Restart – Cont'd

	Scoping	Discovery	Analysis	Implementation
2.b.3. Flood Impact on Soils & Structures	100%	100%	95%	80%
2.b.4. Containment Penetration Design	100%	100%	75%	10%
2.b.5. Containment Internal Structure Design	100%	90%	75%	5%

2.a. Flood Recovery Restoration Actions

- Fort Calhoun Station Flooding Recovery Plan
 - 453 Actions in Six Sections
 - Site Restoration
 - Plant Systems and Equipment
 - Long Term Equipment Reliability
 - Design and Licensing Basis
 - Emergency Planning
 - Security
 - Flood Restoration Actions Part of the Integrated Performance Improvement Plan

2.a. Flood Recovery Restoration Actions

- Total Flood Recovery Plan
 - 453 Actions
- Physical Work Complete
 - 410 Actions
- Closure Review Board Complete
 - 343 Actions
- NRC Inspection Plan
 - 196 Actions
- NRC Inspection Complete
 - 67 Actions

2.b.1 System Health Reviews

- Process Documented in a Station Procedure
- Evaluating Important Plant Systems
- Identify Issues that Could Affect System Health
- Enter Issues into Corrective Action Program
- Provide Confidence that Systems are Ready for Restart

2.b.3. Flood Impact on Soils & Structures Final Actions

- Local Expert Geotechnical Firm's Analysis Final Report Issued on September 18, 2012
- Issuance of Final Safety-Qualified Expert Firm's Analysis Final Report Delayed
- Conclusion – No Negative Effects on Safety-Related Structures
- Restart Checklist Closure Package Ready for Inspection – December



2.b.4 Containment Penetration Design

Fort Calhoun Staff Identified 614 Containment Penetrations that Could Degrade under Certain Potential Accident Conditions

- Approximately 170 Unused Penetrations will be Capped
- Approximately Ten Penetrations will be Replaced
- Options are Being Evaluated for Resolution of the Remaining Penetrations



2.b.5 Containment Internal Structure Design

Fort Calhoun Staff Identified Certain Structural Elements Inside the Containment may not Meet Design Margins – Containment Shell not Affected

- Completed As-Built Verifications and Discovery nearly Complete
- Developed Engineering Models for Analysis
- Analyzed Internal Structures using Current Licensing Requirements
- Evaluating Options for Resolution



Commitment 4 Progress on Programs and Processes Ready for Restart

	Scoping	Discovery	Analysis	Implementation
3.a. Corrective Action Program	100%	100%	100%	70%
3.a.1. Identify, Analyze & Correct Performance Deficiencies	100%	100%	100%	50%
3.b.1. Safety Related Parts	100%	100%	75%	5%
3.b.2. Equipment Qualification	100%	90%	60%	20%



Commitment 4 Progress on Programs and Processes Ready for Restart – Cont'd

	Scoping	Discovery	Analysis	Implementation
3.c.1. Vendor Modifications	100%	100%	95%	10%
3.c.2. 10CFR50.59 Screening & Safety Evaluations	100%	98%	75%	20%
3.d.1. Vendor Manuals	100%	100%	95%	55%
3.d.2. Equipment Service Life	100%	100%	95%	5%



Commitment 4 Progress on Programs and Processes Ready for Restart – Cont'd

	Scoping	Discovery	Analysis	Implementation
3.e.1. Operability Determinations	100%	100%	80%	15%
3.e.2. Degraded / Non-Conforming Equipment	100%	100%	80%	15%
3.f. Quality Assurance	100%	100%	100%	83%



3.a. Corrective Action Program (CAP)

- Fort Calhoun Staff has been Implementing Improved CAP Process for Six Months
- Process Implementation Improvement and Effectiveness Observed
- Expected Behaviors and Culture Being Reinforced



3.a. Corrective Action Program (CAP)

- Corrective Action Program Metric Elements
 - Condition Report Generation
 - Engagement Ratio
 - Good Catches
 - Self-Identification Rate
 - Repeat Events
 - Review Rejection Rate
 - Age of Reviews and Actions
 - Overdue Reviews and Actions
 - Number of Open Condition Reports



Commitment 5 Integrated Performance Improvement Plan (IPIP)

- IPIP Revision 4 Docketed November 1
- Addresses Restart Decision-Making Process and Criteria
- Describes Plan for Sustained Improvement



Restart Decision-Making Criteria

- Restart Checklist Items Resolved
- Confirmatory Action Letter Commitments Addressed
- Operational Readiness Assessment Completed
- Systems, Programs and Departments Determined to be Ready for Restart
- Independent Assessments Completed
 - Nuclear Oversight Department
 - Corporate Governance and Oversight Committee
 - Safety Audit and Review Committee
- Restart Report Submitted to NRC

Plan for Sustained Improvement

- Operating Services Agreement is the Foundation for Achieving and Sustaining Excellence
- Blended OPPD/Exelon Leadership Team Functioning Effectively
- Integration Team of Exelon Experts Providing Site Support and Transition Planning in 22 Functional Areas
- Goal - Implement the Exelon Nuclear Management Model and Full Integration into the Exelon Fleet

Independent Assessments



OPPD's Commitment

Tonight We Updated You on

- Plant Status – Fixing the Plant
- Progress on Commitments for Restart
- Restart Decision-Making
- Plan for Sustained Improvement
- Independent Assessments

Fort Calhoun Station

Vision

Safe and efficient restart of Fort Calhoun Station and achievement of sustained excellence

Mission

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

Values

- Safety – Nuclear, Industrial, Radiological, & Environmental
- Alignment
- Accountability
- Bias for Action
- Strong Nuclear Safety Culture