



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

May 10, 2013

Louis P. Cortopassi, Site Vice President  
Omaha Public Power District  
Fort Calhoun Station FC-2-4  
P.O. Box 550  
Fort Calhoun, NE 68023-0550

Subject: FORT CALHOUN STATION - NRC INTEGRATED INSPECTION REPORT  
NUMBER 05000285/2013003

Dear Mr. Cortopassi:

On March 31, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Fort Calhoun Station. The enclosed inspection report documents the inspection results which were discussed on April 26, 2013, with you and other members of your staff.

The inspection(s) examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings were identified during this inspection.

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

Sincerely,

/RA/

Michael Hay, Chief  
Project Branch F  
Division of Reactor Projects

Docket No.: 50-285  
License No.: DPR-40

Enclosure: NRC Inspection Report 05000285/2013003  
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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 05000285  
License: DPR-40  
Report: 05000285/2013003  
Licensee: Omaha Public Power District  
Facility: Fort Calhoun Station  
Location: 9610 Power Lane  
Blair, NE 68008  
Dates: February 17 through March 31, 2013  
Inspectors: J. Kirkland, Senior Resident Inspector  
J. Wingeback, Resident Inspector  
J. Laughlin, Emergency Preparedness Inspector  
Approved By: Michael Hay, Chief  
Project Branch F  
Division of Reactor Projects

## **SUMMARY OF FINDINGS**

IR 05000285/2013003; 02/17/2013 – 03/31/2013; Fort Calhoun Station Integrated Resident and Regional Report

The report covered a six-week period of inspection by resident and regional inspectors. No findings of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609, "Significance Determination Process." The cross-cutting aspect is determined using Inspection Manual Chapter 0310, "Components Within the Cross-Cutting Areas." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

**A. NRC-Identified Findings and Self-Revealing Findings**

None

**B. Licensee-Identified Violations**

None

## REPORT DETAILS

### Summary of Plant Status

The station remained in Mode 5 with the fuel in the spent fuel pool for the entire inspection period.

#### 1. REACTOR SAFETY

##### Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

#### 1R05 Fire Protection (71111.05)

##### .1 Quarterly Fire Inspection Tours

###### a. Inspection Scope

The inspectors conducted fire protection walkdowns that were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- March 6, 2013, fire area 34A, electrical penetration area – basement, Room 20
- March 6, 2013, fire area 34B, electrical penetration area ground and intermediate levels, Room 57
- March 15, 2013, fire area 41, cable spreading room, Room 70

The inspectors reviewed areas to assess if licensee personnel had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant; effectively maintained fire detection and suppression capability; maintained passive fire protection features in good material condition; and had implemented adequate compensatory measures for out of service, degraded or inoperable fire protection equipment, systems, or features, in accordance with the licensee's fire plan. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to affect equipment that could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the attachment, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's corrective action program (CAP). Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of three quarterly fire-protection inspection samples as defined in Inspection Procedure 71111.05-05.

b. Findings

No findings were identified.

**Cornerstone: Emergency Preparedness**

**1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)**

a. Inspection Scope

The Nuclear Security and Incident Response headquarters staff performed an in-office review of the latest revisions of various emergency plan implementing procedures and the emergency plan located under ADAMS accession numbers ML13002A034 and ML13052A047.

The licensee determined that in accordance with 10 CFR 50.54(q), the changes made in the revisions resulted in no reduction in the effectiveness of the Plan, and that the revised Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The NRC review was not documented in a safety evaluation report and did not constitute approval of licensee-generated changes; therefore, this revision is subject to future inspection. The specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of four samples as defined in Inspection Procedure 71114.04-05.

b. Findings

No findings were identified.

**4. OTHER ACTIVITIES**

**Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security**

**4OA2 Problem Identification and Resolution (71152)**

**.1 Routine Review of Identification and Resolution of Problems**

a. Inspection Scope

As part of the various baseline inspection procedures the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. The inspectors reviewed attributes that included the complete and accurate identification of the problem; the timely correction, commensurate with the safety significance; the evaluation and disposition of performance issues, generic

implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrences reviews; and the classification, prioritization, focus, and timeliness of corrective actions. Minor issues entered into the licensee's CAP because of the inspectors' observations are included in the attached list of documents reviewed.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. The inspectors accomplished this through review of the station's daily corrective action documents.

The inspectors performed these daily reviews as part of their daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

**4OA3 Followup of Events and Notices of Enforcement Discretion (71153)**

.1 (Open) Licensee Event Report 05000285/2012-021-00: HCV-2987, HPSI Alternate Header Isolation Valve

On January 29, 2012, while reviewing design calculations as part of the extent of condition for condition report (CR) 2011-9945, it was identified that valve HCV-2987, High Pressure Safety Injection Alternate Header Isolation, would not have been able to fulfill its design safety function found in Updated Safety Analysis Report Table 9.12.1 and Technical Specification 2.3. The last FlowScan analyses performed in 2008 indicated a higher than acceptable valve packing friction to the point that the valve would not have been able to fulfill its function after the 24 hour mission time with a loss of instrument air. No corrective action was taken after the 2008 FlowScan analyses to fix the condition. At the time of discovery in 2012, Fort Calhoun Station was in Mode 5 (refueling).

A causal analysis is in progress and the preliminarily root cause identified failure of the station to compare FlowScan data with approved calculations and a lack of corrective

actions. Repacking and testing of the valve has been planned. Completion of the AOV Program procedure, currently being developed, will assure that the appropriate test activities are defined and that the results are appropriately addressed.

.2 (Open) Licensee Event Report 05000285/2013-001-00: Mounting of GE HFA Relays does not Meet Seismic Requirements

On January 15, 2013, while reviewing a previous condition report, it was identified that a previous operability determination completed for General Electric model HFA relays was incorrect in that it did not appear to fully address the condition of the mounting screws that required torqueing. The seismic test results stated that the GE HFA relays passed the seismic testing, but the relays required two screws to be torqued to 5 foot-pounds. This condition of the additional required torqueing was initially entered into the CAP on December 21, 2012.

Currently, approximately 136 relays that provide various indication and control functions in systems such as high pressure safety injection, charging, containment ventilation, and the emergency diesel generator, have been identified as potentially affected. Relay replacement/torqueing is in progress. A cause analysis is in progress.

.3 (Open) Licensee Event Report 05000285/2013-002-00: CVCS Class 1 & 2 Charging Supports are Unanalyzed

On January 25, 2013, while preparing for a charging and letdown piping modification, it was identified that the assumed stiffness values of the supports are higher than originally documented. As a result, the supports are much more rigid and result in overstressing a portion of the Class 2 charging (CH-2014) piping. Failure of the piping could result in release of radioactive material through Penetration M-3 due to the lack of double isolation. The plant was shut down and defueled when this condition was identified and entered in to the CAP.

Further analysis determined that the new calculated stiffness values over-stressed the piping, which could result in pipe failure in the charging Class 2 piping during a seismic event. The Class 1 portion of the charging and Class 1 and 2 portions of the letdown piping were unaffected. A cause analysis is in progress.

#### **4OA4 Inspection Manual Chapter 0350 Inspection Activities (92702)**

Inspectors continued implementing Inspection Manual Chapter 0350 inspection activities, which include follow-up on the restart checklist items contained in the Confirmatory Action Letter (CAL) issued February 26, 2013 (EA-13-020, ML13057A287). The purpose of these inspection activities is to assess the licensee's performance and progress in addressing its implementation and effectiveness of Fort Calhoun Station's Integrated Performance Improvement Plan significant performance issues, weaknesses in programs and processes, and flood restoration activities.



Inspectors used the criteria described in baseline and supplemental inspection procedures, various programmatic NRC inspection procedures, and Inspection Manual Chapter 0350 to assess the licensee's performance and progress in implementing its performance improvement initiatives. Inspectors performed on-site and in-office activities, which are described in more detail in the following sections of this report. This report covers inspection activities from January 1 through February 16, 2013. Specific documents reviewed during this inspection are listed in the attachment.

The following inspection scope, assessments, observations, and findings are documented by the CAL restart checklist item number.

### **Flood Restoration and Adequacy of Structures, Systems, and Components**

Section 2 of the restart checklist contains those items necessary to ensure that important structures, systems and components affected by the flood and safety significant structures, systems and components at Fort Calhoun Station are in appropriate condition to support safe restart and continued safe plant operation. Section 2 reviews will also include an assessment of how the licensee appropriately addressed the NRC Inspection Procedure 95003 key attributes as described in Section 6.

#### **.a Flood Recovery Plan Actions Associated With Facility and System Restoration**

Item 2a is the NRC's independent evaluation of Fort Calhoun Station's flood recovery plan. An overall flood recovery plan is important to ensure the station takes a comprehensive approach to restoring the facility structures, systems, and components to pre-flood conditions.

The areas to be inspected are identified in the CAL. Inspection items are considered complete when the licensee has submitted a closure package that has been satisfactorily reviewed by the inspectors.

#### **(1) CAL Action Item 1.2.1.1**

##### **i. Inspection Scope**

The purpose of Action Item 1.2.1.1 was to determine if equipment in the intake structure and cells had been damaged during the flood. This item was required to be completed prior to exceeding 210°F in the reactor coolant system.

This action item was created to determine if equipment was damaged, not to verify that the damaged equipment was repaired. The inspectors do note what flood recovery action items verify repairing equipment. If there is no specific flood recovery action item for a given deficiency, the inspectors will verify in this section what repairs were made and verify the adequacy of these repairs.

During the flood, the intake structure was exposed to floodwaters up to 1,007 feet mean sea level. Damage could be to the structure itself or to any equipment inside the intake structure.

Components inside the intake structure consist of the following systems: auxiliary cooling (which includes raw water and component cooling water), auxiliary instrumentation, circulating water, electrical distribution, fire protection, hoisting equipment, and instrument air. The inspectors utilized their completed review of these systems in Section 2.2 of the flood recovery plan, except those not yet completed (auxiliary cooling and circulating water) to identify damaged equipment. The inspectors utilized the condition reporting system to identify any damage to the structure itself.

The inspectors identified five issues regarding damage in the intake structure and its components.

- Intake cell level transmitters were wetted and Indicator AI-339 (travelling screen data collection system cabinet) did not indicate intake cell levels. The licensee replaced the transmitters after the flood waters receded, and raised the transmitters several feet to minimize flood impact in the future. The inspectors verified that the transmitters were functioning properly.
- Damage was done to two of the circulating water pump motors (CW-1A and CW-1C). There is an existing flood recovery action plan (Action Item 2.3.1.4) to repair these two motors. The inspectors have yet to complete the inspection of this action item.
- Excessive sanding was noted in the intake cells. There is an existing flood recovery action plan (Action Item 1.2.1.2) that is not part of the CAL. The inspectors did however review the actions associated with this action item, and verified that the excessive sand buildup had been removed.
- Damage was noted to pyrocrete fire barriers in the intake structure. The inspectors identified this in the review of flood recovery action plan Item Number 2.1.1.4 (Inspection Report 05000285/2012003, ML12226A630). As noted in this inspection report, two additional action items were created to repair the damaged pyrocrete; 2.1.3.9 was to repair the pyrocrete in the intake structure, and 2.1.3.11 was to repair the pyrocrete in Manhole 31 adjacent to the intake structure. The inspectors completed the review of 2.1.3.9 in Inspection Report 05000285/2012003. The inspectors have yet to complete the inspection of Action Item 2.1.3.11.
- The raw water pump and circulating water pump cables were noted to be wetted. There is an existing flood recovery action plan (Action Item 3.2.2.1) to test these cables. The inspectors have yet to complete the inspection of this action item.

This activity constitutes completion of Action Item 2.1.1.8 as described in CAL EA-13-020.

ii. Findings

No findings were identified.

(2) CAL Action Item 2.1.1.8

ii. Inspection Scope

The purpose of Action Item 2.1.1.8 was to complete fire protection system preventive maintenance and surveillance tests on flood impacted equipment which was not accessible for inspection and testing during the flood. This item was required to be completed prior to exceeding 210°F in the reactor coolant system.

The inspectors reviewed all of the surveillance tests associated with the fire protection system, and identified four that were not performed due to the flooding. In addition, the inspectors noted two deferred preventive maintenance items due to the flood.

The licensee performed surveillance tests OP-ST-FP-0001A, "Fire Protection System Inspection and Test," (flow path verification), OP-ST-FP-0001C, "Fire Protection System Inspection and Test," (monthly operability testing of the motor-driven fire pump, FP-1A), OP-ST-FP-0001D, "Fire Protection System Inspection and Test," (monthly operability testing of diesel-driven fire Pump FP-1B), and OP-ST-FP-0002, "Fire Protection Water Suppression System Valve Cycling Test."

The inspectors observed portions of the surveillance tests and preventive maintenance tasks and reviewed the results. The only item of note was that the alarms in the old warehouse could not be tested due to a power outage. The inspectors did verify that the alarms in the old warehouse were tested in the next month's performance of OP-PM-FP-1001B.

This activity constitutes completion of Action Item 2.1.1.8 as described in CAL EA-13-020.

ii. Findings

No findings were identified.

(3) CAL Action Item 2.2.1.9

iii. Inspection Scope

The purpose of Action Item 2.2.1.9 was to assess the effects of the flood on the electrical distribution system and identify actions to restore the system. This item was required to be completed prior to exceeding 210°F in the reactor coolant system.

The inspectors independently reviewed the system to identify if there were any temporary modifications in place as a result of the flood, if there were any outstanding preventive maintenance activities that had been deferred due to the flood, and reviewed condition reports to determine if there were any deficiencies noted due to the flood. The inspectors queued condition reports that were related to flooding, written between April 1, 2011, and December 31, 2011. The inspectors also conducted a complete system walkdown to identify any adverse conditions related to flooding. The inspectors compared the results of their independent assessment to those contained in the licensee's Flooding Recovery Startup System Health Assessment report.

The electrical distribution system is required to meet the demands for plant operation and control. During normal operations, it supplies the electrical power for all plant loads. During normal and abnormal conditions, it must continuously and reliably supply the electrical power for safe reactor shutdown and the removal of decay heat during postulated accidents and natural disasters including the design basis accident maximum hypothetical earthquake, tornado, fire, or flooding. The safety-related functions of the AC distribution system are to provide reliable distribution of electrical energy to the safety-related loads during accident and post-accident conditions; and provide two redundant, electrically and physically independent distribution trains to the safety-related loads. The safety-related functions of the DC distribution system are to provide a non-interruptible power source for the safety-related inverters and DC control and instrumentation circuits during normal operation, shutdown, or accident and post-accident conditions; and provide an independent, non-interruptible power source for the safety-related inverters and the DC control and instrumentation circuits for a minimum of eight hours upon loss of all AC plant electrical sources or loss of the battery chargers during normal operation, shutdown, or accident and post-accident conditions.

The inspectors identified five temporary modifications that were installed during the flood. Four of the modifications involved installing temporary power for various plant components, and the other was to install a concrete wall around the main transformers. Three of the temporary modifications have been removed, and two have become permanent modifications. One involved an overhead transformer for the meteorological tower, and the other was the concrete wall.

The inspectors identified no preventive or corrective maintenance which were deferred because of the flooding.

The inspectors reviewed 34 condition reports written related to the flood. The majority of these involved leaks identified during the flood. The inspectors reviewed the corrective actions associated with these condition reports and determined that there were no outstanding issues associated with the electrical distribution system.

The independent walkdown performed by the inspectors identified no current adverse conditions to the electrical distribution system and its individual components as a result of the flood.

This activity constitutes completion of Action Item 2.2.1.9 as described in CAL EA-13-020. It should be noted that the purpose of this action item was to assess the effects of the flood on the electrical distribution system. A detailed evaluation of the health of the electrical distribution system will be conducted prior to plant startup. This evaluation will be conducted and documented in accordance with Section 2.b.1.22 of the Fort Calhoun Station restart checklist basis document.

ii. Findings

No findings were identified.

(4) CAL Action Item 2.2.1.12

i. Inspection Scope

The purpose of Action Item 2.2.1.12 was to assess the effects of the flood on the fire protection system and identify actions to restore the system. This item was required to be completed prior to exceeding 210°F in the reactor coolant system.

The inspectors independently reviewed the system to identify if there were any temporary modifications in place as a result of the flood, if there were any outstanding preventive or corrective maintenance activities that had been deferred due to the flood, and reviewed condition reports to determine if there were any deficiencies noted due to the flood. The inspectors queued condition reports that were related to flooding, written between April 1 and December 31, 2011. The inspectors also conducted a complete system walkdown to identify any adverse conditions related to flooding. The inspectors compared the results of their independent assessment to those contained in the licensee's Flooding Recovery Startup System Health Assessment report.

The fire protection system is designed to detect, alarm, and extinguish plant fires. Rapid system response ensures that damage to plant equipment due to fire is minimized. The functions of the fire protection system are to: maintain ability to safely shut down the plant and minimize radioactive releases if a fire occurs; minimize fire damage to plant equipment; provide prompt detection, alarm, and extinguishing of fires; provide a supply of makeup water from the Missouri River to the emergency feedwater storage tank via hose connections; supply backup cooling water to the raw water and component cooling water heat exchangers via fire hose connections; and reduce the probability of a sustained plant fire.

The inspectors identified one temporary modification that was installed during the flood. That modification installed caps on flood vulnerable pipe fittings on the fuel oil storage tank for the diesel fire pump. The inspectors verified that this modification had been removed.

The inspectors reviewed 40 condition reports written related to the flood. The inspectors reviewed the corrective actions associated with these condition reports and determined that there were no outstanding issues associated with the fire protection system. The majority of the items identified were corrected as part of existing flood recovery Action Plan 2.1.1.8 (discussed above) and 2.1.1.2 (discussed in Inspection Report 05000285/2012002, ML13045B055).

The independent walkdown performed by the inspectors identified no current adverse conditions to the fire protection system and its individual components as a result of the flood.

This activity constitutes completion of Action Item 2.2.1.12 as described in CAL EA-13-020. It should be noted that the purpose of this action item was to assess the effects of the flood on the fire protection system. A detailed evaluation of the health of the fire protection system will be conducted prior to plant startup. This evaluation will be conducted and documented in accordance with Section 2.b.1.27 of the Fort Calhoun Station restart checklist basis document.

ii. Findings

No findings were identified.

(5) CAL Action Item 2.2.1.25

i. Inspection Scope

The purpose of Action Item 2.2.1.25 was to assess the effects of the flood on the ventilation air conditioning systems and identify actions to restore the system. This item was required to be completed prior to exceeding 210°F in the reactor coolant system.

The inspectors independently reviewed the system to identify if there were any temporary modifications in place as a result of the flood, if there were any outstanding preventive or corrective maintenance activities that had been deferred due to the flood, and reviewed condition reports to determine if there were any deficiencies noted due to the flood. The inspectors queued condition reports that were related to flooding, written between April 1, 2011, and September 30, 2012. The inspectors also conducted a complete system walkdown to identify any adverse conditions related to flooding. The inspectors compared the results of their independent assessment to those contained in the licensee's Flooding Recovery Startup System Health Assessment report.

The primary purpose of the ventilation air conditioning systems is to provide ventilation and heating or cooling, as required, for personnel comfort and equipment protection.

The inspectors identified one temporary modification that was installed due to the flooding. On June 26, 2011, the water filled dam surrounding the plant ruptured and as a result, flooded out the condensing units for the east and west switchgear cooling units. Temporary cooling was installed on July 2, 2011, and the temporary units were removed on July 20, 2011.

The inspectors identified no preventive or corrective maintenance that was deferred due to the flooding.

The inspectors reviewed 18 condition reports written related to the flood. The inspectors reviewed the corrective actions associated with these condition reports and determined that there were no outstanding issues associated with the ventilation air conditioning systems. There was one condition report that documented the issue associated with the condensing units for the east and west switchgear cooling units following the rupture of the water filled dam surrounding the plant. Following the installation of the new water filled dam, the licensee cleaned the units prior to returning them to service. The inspectors observed the testing of the units following cleaning, and reviewed the test results and observed no abnormalities with the testing or the results.

The independent walkdown performed by the inspectors identified no current adverse conditions to the ventilation air conditioning systems and the individual components as a result of the flood.

This activity constitutes completion of Action Item 2.2.1.25 as described in CAL EA-13-020. It should be noted that the purpose of this action item was to assess the effects of the flood on the ventilation air conditioning systems. A detailed evaluation of the health of the ventilation air conditioning systems will be conducted prior to plant startup. This evaluation will be conducted and documented in accordance with Section 2.b.1.14 of the Fort Calhoun Station restart checklist basis document.

ii. Findings

No findings were identified.

(6) CAL Action Items 4.2.1.4 and 4.2.1.5

i. Inspection Scope

The purpose of Action Items 4.2.1.4 and 4.2.1.5 was to perform walkdowns of all flood mitigation devices (i.e., berms, sandbags, HESCO barriers) to determine if each device is to be removed or is to remain and initiate actions to remove flood

mitigation devices which have been determined to not be permanent fixtures. These items were required to be completed prior to exceeding 210°F in the reactor coolant system.

These items are duplicated in the review the inspectors completed for CAL Action Item 4.3.1.4, which is documented in Inspection Report 05000285/2012002, ML13045B055. Action Item 4.3.1.4 was to remove non-permanent configuration changes, which include all flood mitigation devices.

Due to the duplication of these action items, this constitutes completion of Action Items 4.2.1.4 and 4.2.1.5 as described in CAL EA-13-020.

ii. Findings

No findings were identified.

**4OA6 Meetings, Including Exit**

Exit Meeting Summary

On April 26, 2013, the inspectors presented the inspection results to Mr. L. Cortopassi, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.



## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee Personnel**

J. Bousum, Emergency Planning Manager  
R. Cade, Manager Operations Training  
C. Cameron, Supervisor Regulatory Compliance  
L. Cortopassi, Site Vice President  
M. Ferm, Manager, System Engineering  
T. Maine, Manager, Radiation Protection  
E. Matzke, Senior Licensing Engineer  
S. Miller, Manager, Design Engineering  
E. Plautz, Supervisor, Emergency Planning  
M. Prospero, Division Manager, Plant Operations  
S. Shea, Supervisor Operations Training (Requal)  
T. Simpkin, Manager, Site Regulatory Assurance

### **LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

#### **Opened**

05000285/2012-021-00 LER HCV-2987, HPSI Alternate Header Isolation Valve  
(Section 4OA3.1)  
05000285/2013-001-00 LER Mounting of GE HFA Relays does not Meet Seismic  
Requirements (Section 4OA3.2)  
05000285/2013-002-00 LER CVCS Class 1 & 2 Charging Supports are Unanalyzed  
(Section 4OA3.3)

### **LIST OF DOCUMENTS REVIEWED**

#### **Section 1RO5: Fire Protection**

#### **PROCEDURES**

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
SO-G-28	Standing Order, Station Fire Plan	84
SO-G-58	Standing Order, Control of Fire Protection System Impairments	37
SO-G-91	Standing Order, Control and Transportation of Combustible Materials	28
SO-G-102	Standing Order, Fire Protection Program Plan	14
SO-G-103	Standing Order, Fire Protection Operability Criteria and Surveillance Requirements	26

## MISCELLANEOUS DOCUMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
EA-FC-97-001	Fire hazards Analysis Manual	16
FC05814	UFHA Combustible Loading Calculation	11
USAR 9.11	Updated Safety Analysis Report, Fire Protection Systems	23

## **Section 1EP4: Emergency Action Level and Emergency Plan Changes**

### PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
	Radiological Emergency Response Plan, Appendix C, NUREG/RERP/Implementing Procedure Cross Reference List	16
	Radiological Emergency Response Plan, Section O, Radiological Emergency Response Training	14b
	Radiological Emergency Response Plan, Section P, Responsibility for the Planning Effort: Development, Periodic Review and Distribution	13
	Radiological Emergency Response Plan, Section B, Organizational Control of Emergencies	30

## **Section 4OA2: Problem Identification and Resolution (71152)**

### PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
FCSG-24-1	Condition Report Initiation	4
FCSG-24-3	Condition Report Screening	6a
FCSG-24-4	Condition Report and Cause Evaluation	6a
FCSG-24-6	Corrective Action Implementation and Condition Report Closure	8
SO-R-2	Condition Reporting and Corrective Action	53b

## **Section 4OA4: Inspection Manual Chapter 0350 Inspection Activities**

### CONDITION REPORTS

2011-2531	2011-2844	2011-2939	2011-3143	2011-3211
2011-4104	2011-4189	2011-4209	2011-4278	2011-4392

### CONDITION REPORTS

2011-4487	2011-4517	2011-4673	2011-4787	2011-4820
2011-4854	2011-4869	2011-4881	2011-4965	2011-5007
2011-5103	2011-5134	2011-5143	2011-5162	2011-5175
2011-5227	2011-5282	2011-5403	2011-5405	2011-5414
2011-5429	2011-5505	2011-5523	2011-5619	2011-5722
2011-5762	2011-5783	2011-5813	2011-5842	2011-5860
2011-5934	2011-5944	2011-5999	2011-6063	2011-6099
2011-6248	2011-6266	2011-6298	2011-6309	2011-6318
2011-6393	2011-6479	2011-6544	2011-6758	2011-6771
2011-6811	2011-6827	2011-6947	2011-6997	2011-7039
2011-7081	2011-7082	2011-7083	2011-7084	2011-7085
2011-7086	2011-7111	2011-7139	2011-7322	2011-7416
2011-7515	2011-7520	2011-7523	2011-7674	2011-7689
2011-7725	2011-7784	2011-7948	2011-7962	2011-7969
2011-8008	2011-8024	2011-8050	2011-8141	2011-8201
2011-8547	2011-8856	2011-9531	2011-9822	2011-9904
2011-10247	2011-10248	2011-10273	2011-10514	2011-8955
2011-6557				

### WORK ORDERS

415441	415512	418906	415946	415109
396738	403508	409525	408847	407158
407846	403929	403515	417681	417698

### CONSTRUCTION WORK ORDERS

287130

### PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
OP-PM-FP-1001A	Monthly Fire Protection System Inspection (Week 1)	27

## PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
OP-PM-FP-1001B	Monthly Fire Protection System Inspection (Week 2)	33
OP-ST-FP-0001A	Fire Protection System Inspection and Test	17
OP-ST-FP-0001C	Fire Protection System Inspection and Test	23
OP-ST-FP-0001D	Fire Protection System Inspection and Test	27
OP-ST-FP-0002	Fire Protection Water Suppression System Valve Cycling Test	33

## ENGINEERING CHANGE

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / DATE</u>
53241	Install Overhead Transformer for MET Tower Emergency Power Feed	June 8, 2011
53261	Provide Temporary 480VAC to a Power Pack from PS-MPP-S1	June 9, 2011
53260	Concrete Wall Around Transformers	June 11, 2013
54304	Permanent Wall Around Transformers	0
53364	Provide Temporary Power to PS-MPP-S4 and PS-MPP-S9 from PS-MPP-S3	June 28, 2011
53285	Temp Power to MPP-3W	June 14, 2011
53239	Install Temporary Caps/Plugs on Flood Vulnerable Pipe Fittings on Fuel Oil/Gas Storage Tanks FO-27 and FO-43A/B	June 6, 2011