your energy partner
OPPD
Omaha Public Power District
444 South 16th Street Mall
Omaha, NE 68102-2247

LIC-12-0167
November 29, 2012

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Reference: Docket No. 50-285

Subject: Licensee Event Report 2012-008, Revision 1, for the Fort Calhoun Station

Please find attached Licensee Event Report 2012-008, Revision 1, dated November 29, 2012. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B). No commitments are being made in this letter.

If you should have any questions, please contact me.

Sincerely,

Louis P. Cortopassi
Site Vice President and CNO

LPC /rjr/EPM

Attachment
c: E. E. Collins, Jr., NRC Regional Administrator, Region IV
L. E. Wilkins, NRC Project Manager
J. C. Kirkland, NRC Senior Resident Inspector

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Fort Calhoun Station	05000285	1 OF 3

4. TITLE

Technical Specification Violation for Fuel Movement (VA-66)

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
										05000
9	28	2011	2012	- 008 -	1	11	29	2012	FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE

5

10. POWER LEVEL

0

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
☐ 20.2203(a)(2)(vi)	☒ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Erick Matzke	402-533-6855

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

ABSTRACT *(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)*

On September 28, 2011, Fort Calhoun Station (FCS) Condition Report 2011-7800 identified the failure of the spent fuel pool area charcoal filter (VA-66) to pass the elemental iodine removal test. During a subsequent review of this CR by the Recovery Engineering group, it was determined that on June 6, 2012, fuel had been moved during a time when VA-66 was required to be OPERABLE. The FCS Technical Specification, 2.8.3(4), requires the Spent Fuel Pool Area ventilation system to be IN OPERATION during REFUELING OPERATIONS.

A cause analysis determined that a lack of management oversight and the failure of Engineering to take a proactive approach in the prevention of future test failures lead to this event. Completed corrective actions include 1) a revision of the applicable procedure to trend charcoal sample results and predict replacement 2) replacement of the depleted charcoal currently installed, and 3) a change the frequency of the charcoal testing from eighteen months to 1 year.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Fort Calhoun Station	05000285	2012	- 008	- 1	2 OF 3

NARRATIVE

BACKGROUND

The Fort Calhoun Station (FCS) Auxiliary Building Heating, Ventilation, and Air Conditioning (HVAC) system is designed and operated to protect station personnel and the public from airborne radioactivity, and to provide environmental control for safety-related instrumentation, controls, and equipment. There are several charcoal filters in the Auxiliary Building HVAC system, including the Spent Fuel Pool (SFP) area charcoal filter (VA-66). The filters are made of activated charcoal and have one-inch thick adsorber beds. The charcoal filter (VA-66) is installed in a normally bypassed section of the exhaust ductwork which draws air from the SFP area. The exhaust from the SFP area is monitored for radioactive contamination. If radiation is detected, the charcoal filter (VA-66) can be placed on line from the Control Room. The system does not automatically realign and therefore must be IN OPERATION during refueling operations in the SFP.

Technical Specification (TS) 2.8.3(4) requires the SFP area ventilation to be IN OPERATION during REFUELING OPERATIONS in the SFP to minimize the consequences that could affect public health and safety. With the SFP area ventilation system not in OPERATION, suspend REFUELING OPERATIONS in the SFP immediately.

FCS Updated Safety Analysis Report (FSAR), Section 14.18, contains the safety analysis for fuel handling accidents (FHA) in the SFP and containment. It states, the activity associated with a FHA in the SFP is collected by the fuel pool area ventilation system and released, unfiltered, to the environment. The analysis does not credit removal of any radioiodine through operation of the SFP charcoal filter (VA-66); offsite radiological consequences are well within the 10 CFR 50.67 requirements without the charcoal filtration.

EVENT DESCRIPTION

FCS TS Section 3.2, Table 3-5, Item 10b.2, requires laboratory testing of the SFP area charcoal filter (VA-66) on a refueling frequency or every 720 hours of operation, or following significant painting, fire, or chemical release in any ventilation zone communicating with the system to ensure the methyliodide penetration is less than 10 percent when tested in accordance with ASTM D3803-1989 at a temperature of 30 degrees C (86 degrees F) and a relative humidity of 95 percent. Laboratory testing must be completed within 31 days after removal of a sample of the charcoal adsorber.

There have been repeated charcoal efficiency test failures since 2005 when testing requirements changed with the adoption of ASTM D3803-1989. These failures provided evidence that the charcoal filters were no longer capable of meeting the 18-month surveillance frequency. However, tracking and trending of test failures was not required providing a missed opportunity to correct the condition.

On September 28, 2011, FCS Condition Report (CR) 2011-7800 identified the failure of the spent fuel pool area charcoal filter (VA-66) to pass the elemental iodine removal test. The CR investigation focused on why the filter failed the testing and did not consider the plant condition while the failed filter had been in service. The condition was questioned as “a condition prohibited by TS” in May of 2012. However, the Engineering review performed agreed with the previous December 2009 station position. A new reportability evaluation was not promptly completed.

As part of an Recovery Engineering review, it was determined on June 6, 2012, that fuel had been moved in the SFP during a time when the VA-66 charcoal filter would have been expected to fail testing, making the filter inoperable and the condition was entered into the station’s corrective action program (CAP). A review of previously completed cause analyses has identified that FCS moved fuel

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Fort Calhoun Station	05000285	2012	- 008	- 1	3 OF 3

NARRATIVE

on three occasions since October of 2009 while the Spent Fuel Pool Area ventilation charcoal filter (VA-66) was likely below the required adsorption capability, hence inoperable.

This LER documents the late reporting of a condition that was prohibited by TS originally identified in September of 2011, and not determined reportable until June 6, 2012. This was due to the belief that since the filters in VA-66 were not credited in the accident analysis, they were not required for operability of the SFP ventilation system.

CONCLUSION

A cause analysis determined that a lack of management oversight and the failure of Engineering to take a pro-active approach in the prevention of future test failures lead to this event.

CORRECTIVE ACTIONS

The following actions were entered into the CAP and are complete. The corrective actions include 1) a revision of the applicable procedure to trend charcoal sample results and predict replacement 2) replacement of the depleted charcoal currently installed, and 3) change the frequency of the charcoal testing from eighteen months to 1 year.

SAFETY SIGNIFICANCE

FCS TS require the SFP area ventilation to be in operation during operations in the SFP to mitigate the consequences of a fuel handling accident. However, the FCS accident analysis for a fuel handling accident in the SFP assumes the activity is collected by the SFP area ventilation system and released, unfiltered, to the environment, via the auxiliary building vent stack. Since there is no means of isolating the SFP area, all of the airborne activity resulting from the fuel handling accident is assumed to be exhausted out of the auxiliary building in a period of two hours. The SFP area ventilation has no safety function as it is not credited for mitigating the radiological consequences of a fuel handling accident even though actual tests have demonstrated the effectiveness of VA-66 in reducing radiation doses. Therefore, there is no safety significance associated with fuel movement when VA-66 is inoperable and this event had no impact on the health and safety of the public.

SAFETY SYSTEM FUNCTIONAL FAILURE

This event does not result in a safety system functional failure in accordance with NEI-99-02.

PREVIOUS EVENTS

The station has had two similar events (movement of fuel with VA-66 inoperable) as documented in LER 90-05 and LER 94-006.

LICENSING CORRESPONDENCE REVIEW FORM

LIC-12-0167

Date Issued: 11/14/12 **Requested Return Date: 11/19/12**

Review/Approval		Information	
L. Cortopassi		L. Smith	
T. Simpkin		V. Naschansky	
S. Miller			
C. Cameron			
M. Ferm			
A. Hackerott			
B. Mierzejewski			

Subject LER 2012-008 Rev1, "Technical Specification Violation for Fuel Movement (VA-66)"

Please review and approve the attached draft correspondence (referenced above). In order to document your review for our records, please sign this form and return it to the Licensing Coordinator. If no notification is received by the requested return date, your concurrence with no comment will be assumed.

_____ Erick Matzke 6855
Technical Coordinator (Ext.) Licensing Coordinator (Ext.)

[ ] Approved with no comment. [ ] Approved pending resolution of comments as noted.

Comments: _____

_____ _____
Reviewer's Signature Date

LICENSING CORRESPONDENCE REVIEW FORM SUMMARY

LIC-12-0167

Date Issued: 11/14/12 Requested Return Date: 11/19/12

Name	Date Comments Received	No Comments[1]	Comments - How Resolved[2]
L. Cortopassi	None		
T. Simpkin	11/20/12		Eighteen corrected.
S. Miller	11/18/12		
C. Cameron	11/20/12	X	verbal
A. Hackerott	11/15/12	X	
B. Mierzejewski	none		
M. Ferm	none		
L. Smith	none		
V. Naschansky	11/14/12	X	

Subject LER 2012-008 Rev1, "Technical Specification Violation for Fuel Movement (VA-66)"	
NOTE – This submittal does ____ does not __X__ include documents/files on CD-ROM.[3]	
NL Comment Coordinator Signature	Date
Responsible Dept. Manager (if required)	Date
Review by Nuclear Licensing Supervisor	Date

[1] Attach only signed Licensing Correspondence Review Form.
[2] Attach necessary documentation.
[3] Ensure that the CD-ROM files are formatted properly for electronic information exchange (EIE) to the NRC. (Reference NL-17)