Omaha Public Power District
444 South 16th Street Mall
Omaha, NE 68102-2247

LIC-13-0185
December 26, 2013

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

Reference: Docket No. 50-285

Subject: Licensee Event Report 2013-018, Revision 0, for the Fort Calhoun Station

Please find attached Licensee Event Report 2013-018, Revision 0. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(ii)(B). There are no new commitments being made in this letter.

If you should have any questions, please contact Terrence W. Simpkin, Manager, Site Regulatory Assurance, at (402) 533-6263.

Sincerely,

Louis P. Cortopassi
Site Vice President and CNO

LPC/epm

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

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

Postulated Fire Event Could Result in Shorts Impacting Safe Shutdown

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
10	28	2013	2013	018 -	0	12	26	2013	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)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☐ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☒ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER

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 October 9, 2013, an event notification applicable to Callaway Nuclear Power Plant was posted that documented a postulated fire event regarding the impact of unfused direct current (DC) ammeter circuits in the control room (CR). In the postulated event, a fire in the CR could cause one of the ammeter wires to short to the ground plane. Simultaneously, if the fire causes another DC wire from the opposite polarity on the same battery to also short to the ground plane, a ground loop would be established through the unprotected ammeter wiring. This event could result in excessive current flow (heating) in the ammeter wiring to the point of causing a secondary fire in the raceway system. The secondary fire could adversely affect safe shutdown equipment and potentially result in the loss of the ability to conduct a safe shutdown as required by 10 CFR50 Appendix R. Plant engineering personnel reviewed the information against station electrical schematics and at approximately 1230 CDT on October 28, 2013, an 8-hour notification was made pursuant to 10 FR 50.72(b)(3)(ii)(B). The station was in Mode 5 when the condition was identified.

An hourly fire watch was established in the affected locations of the station. FCS will install fuses in the DC ammeter circuitry as determined by Engineering Change 62826, Add Fuses to the DC Ammeter Circuitry for Ammeters.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Fort Calhoun Station	05000285	2013	- 018 -	0	2 OF 3

NARRATIVE

BACKGROUND

Fort Calhoun Station (FCS) is a two-loop reactor coolant system of Combustion Engineering (CE) design.

EVENT DESCRIPTION

On October 9, 2013, an event notification applicable to Callaway Nuclear Power Plant was posted that documented a postulated fire event regarding the impact of unfused direct current (DC) ammeter circuits in the control room (CR). In the postulated event, a fire in the CR could cause one of the ammeter wires to short to the ground plane. Simultaneously, if the fire causes another DC wire from the opposite polarity on the same battery to also short to the ground plane, a ground loop would be established through the unprotected ammeter wiring. This event could result in excessive current flow (heating) in the ammeter wiring to the point of causing a secondary fire in the raceway system. The secondary fire could adversely affect safe shutdown equipment and potentially result in the loss of the ability to conduct a safe shutdown as required by 10 CFR50 Appendix R.

Plant engineering personnel reviewed the information against station electrical schematics and at approximately 1230 CDT on October 28, 2013, an 8-hour notification was made to the Headquarters Operations Office under 10 FR 50.72(b)(3)(ii)(B), any event or condition that results in the nuclear power plant being in an unanalyzed condition that significantly degrades plant safety (Event Number 49478). The station was in Mode 5 when the condition was identified. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(ii), any event or condition that resulted in: (B) the nuclear power plant being in an unanalyzed condition that significantly degraded plant safety.

CONCLUSION

The short vulnerabilities described in this report have existed since the original design and installation of the DC ammeter circuitry at FCS.

CORRECTIVE ACTIONS

An hourly fire watch was established in the Control Room, Cable Spreading Room, Switchgear Rooms, and Air Compressor Room as a compensatory action for this postulated fire event. The fire watch will be maintained until completion of Engineering Change (EC) 62826, Add Fuses to the DC Ammeter Circuitry for Ammeters.

FCS will install fuses in the DC ammeter circuitry as determined by EC 62826.

SAFETY SIGNIFICANCE

A fire in the Control Room could cause ammeter wires to short to the ground plane. This would cause a ground loop through the unprotected ammeter wiring to the point of causing a secondary fire in the raceway system. The secondary fire could cause the loss of the ability to conduct a safe shutdown as required by 10 CFR 50 Appendix R.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Fort Calhoun Station	05000285	2013	- 018 -	0	3 OF 3

NARRATIVE

SAFETY SYSTEM FUNCTIONAL FAILURE

This does not represent a safety system functional failure in accordance with NEI 99-02, Revision 7

PREVIOUS EVENTS

None