



Omaha Public Power District

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

LIC-13-0115
December 5, 2013

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

Reference: 1. Docket No. 50-285
2. Letter from OPPD (L. P. Cortopassi) to NRC (Document Control Desk), dated March 19, 2013 (LIC 13-0027)

Subject: Licensee Event Report 2013-001, Revision 1, for the Fort Calhoun Station

Please find attached Licensee Event Report 2013-001, Revision 1. This report is being submitted pursuant to 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/rjr

Attachment

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

LICENSEE EVENT REPORT (LER)

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

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.

1. FACILITY NAME Fort Calhoun Station								2. DOCKET NUMBER 05000285	3. PAGE 1 OF 3
4. TITLE Mounting of GE HFA Relays does not Meet Seismic Requirements									
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
12	21	2012	2013	001 - 1		12	05	2013	FACILITY NAME DOCKET NUMBER 05000
9. OPERATING MODE 5			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)						
			<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)			
			<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)			
			<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input checked="" type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)			
			<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)			
10. POWER LEVEL 0			<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)			
			<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)			
			<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)			
			<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER			
			<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A			
12. LICENSEE CONTACT FOR THIS LER FACILITY NAME Erick Matzke TELEPHONE NUMBER (Include Area Code) 402-533-6855									
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)					15. EXPECTED SUBMISSION DATE <input checked="" type="checkbox"/> NO		MONTH	DAY	YEAR
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)									
<p>On January 15, 2013, while reviewing a previous condition report, it was identified that the initial operability determination (OD) completed for General Electric (GE) 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 back plate mounting screws to be torqued to 5 foot-pounds. The condition of the additional required torqueing had been initially entered into the corrective action program on December 21, 2012.</p> <p>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, were identified as potentially affected. Relay replacement/torqueing has been completed for all identified relays. An investigation found that poor communication (both in writing of technical documents and in interfacing between individuals) was the cause of not identifying the need for the two back plate mounting screws to be torqued to 5 foot-pounds when first reported by the vendor. Corrective actions to provide training on the event and revise procedures have been initiated.</p>									

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NARRATIVE**BACKGROUND**

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

EVENT DESCRIPTION

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

At approximately 2355 Central Standard Time (CST) on February 27, 2013, an 8-hour notification (EN 48787) was made to the Headquarters Operations office (HOO), under 10CFR50.72(b)(3)(ii)(B), unanalyzed condition, reporting this event. During the notification, the event date identified was incorrectly stated as February 26, 2013. This is the date that the initial operability determination was called into question. The correct event date is December 21, 2012. This is the date which OPPD acknowledged, but misinterpreted, that the vendor identified the GE HFAs relays did pass the seismic testing, but the relays required two screws to be torqued to 5 foot-pounds to pass the testing.

This report is being submitted in accordance with 50.73(a)(2)(ii)(B): any event or condition that resulted in the nuclear power plant being in an unanalyzed condition that significantly degraded plant safety.

CONCLUSION

Extent of condition reviews identified 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, were potentially affected. Sixty-three of the relays were identified as not having been replaced since initial operations began. The 63 relays have been replaced and the two back plate mounting screws have been torque checked on all the HFA relays. It is estimated that over 50 percent of the relays were found to have back plate mounting screws torqued to less than 5 foot-pounds. These were torqued to 5 foot-pounds.

An investigation found that poor communication (both in writing of technical documents and in interfacing between individuals) was the cause of not identifying the need for the two back plate mounting screws to be torqued to 5 foot-pounds when first reported by the vendor.

CORRECTIVE ACTIONS

Replacement/torqueing of the affected relays has been completed. Corrective actions have been put in place to:

1. Develop and provide management expectations via a case study to all Design Engineering (DEN) personnel on the miscommunications identified with this event, including failure to validate assumptions.

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NARRATIVE

2. Establish a new preventive maintenance activity to check as-found torque values of the two back plate mounting screws on a sample of 20 of the HFA relays during the next refueling outage following replacement.
3. Review and revise as necessary NOD-QP-31, Operability Determination Process, and FCSG-24-3, Condition report Screening, to better reflect the attributes contained in Regulatory Issue Summary 2005-20, Revision to NRC Inspection Manual Part 9900 Technical Guidance, Operability Determinations and Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety, Revision 1.

SAFETY SIGNIFICANCE

Failure to initially identify and correct the degraded condition placed the plant in an unanalyzed condition which if not corrected, could have significantly degraded plant safety. Important safety functions, such as safety injection and load shedding may not have functioned as designed if the condition was not identified and repairs completed.

The investigation identified that there were two relays at zero foot-pounds torque on the back plate mounting screws. As a result, it cannot be assured that these relays would have been able to perform their design function in the case of a seismic event and 30-day mission. The following 2 system functions were affected by these two relays:

86AX1/SGIS Relay: steam generator isolation signal (SGIS) initiation which closes valves to isolate steam flow and feedwater flow to reduce an uncontrolled steam generator cooldown.

63XA/LC-101-2 Relay: in response to the second low pressurizer level signal (3.3% below programmed level), a signal is produced which starts all 3 charging pumps.

SAFETY SYSTEM FUNCTIONAL FAILURE

This does not represent a safety system functional failure in accordance with NEI 99-02, Revision 6.

PREVIOUS EVENTS

None