



**Omaha Public Power District**

444 South 16<sup>th</sup> Street Mall  
Omaha, NE 68102-2247

LIC-13-0097  
October 31, 2013

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

Reference: 1. Docket No. 50-285  
2. Letter from OPPD (D. J. Bannister) to NRC (Document Control Desk)  
dated July 23, 2012 (LIC-12-0105)

**Subject:** Licensee Event Report 2012-009, Revision 1, for the Fort Calhoun Station

Please find attached Licensee Event Report 2012-009, Revision 1. The original condition no longer represents a safety system functional failure and is being recharacterized as not reportable and submitted as a voluntary report. No commitments are 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/epm

**Attachment**

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

1. FACILITY NAME Fort Calhoun Station								2. DOCKET NUMBER 05000285	3. PAGE 1 OF 2	
4. TITLE Inoperable Equipment due to Lack of Environmental Qualifications										
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	13	2011	2012	- 009 -	1	10	31	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 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 checked="" 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)					
Voluntary Report										
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			
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)										
<p>On December 13, 2011, it was identified that the current analysis of record for the Main Steam Line Break (MSLB) inside containment identified a peak temperature of 358.6 degrees Fahrenheit (F) and the Electrical Environmental Equipment Qualification (EEQ) evaluation assumed a maximum temperature of 401 degrees F. It was also identified that the MSLB temperature has a longer exposure time than the EEQ temperature of approximately 160 seconds. However, no evaluation or analysis could be found to address why the original EEQ assumptions remained valid as the longer exposure time of the MSLB analysis could result in an adverse impact on environmentally qualified equipment. This condition was identified when Fort Calhoun Station was shutdown and defueled.</p> <p>FCS performed a thermal lag analysis to determine the impact of the longer exposure time. The results show that the additional exposure time of the lower MSLB temperature did not adversely affect the EEQ analysis as originally assumed in Event Notification No. 47900 (10 CFR 50.72(b)(3)(ii)(B)). The results of the thermal lag analysis are being documented in the updated program basis documentation. The EEQ Harsh Files for the affected equipment have been revised.</p> <p>The original condition no longer represents a safety system functional failure and this condition is being submitted as a voluntary report.</p>										

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Fort Calhoun Station	05000285	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 2
		2012	- 009 -	1	

**NARRATIVE****BACKGROUND**

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

**EVENT DESCRIPTION**

On December 13, 2011, it was identified that the current analysis of record for the Main Steam Line Break (MSLB) inside containment identified a peak temperature of 358.6 degrees Fahrenheit (F) and the Electrical Environmental Equipment Qualification (EEQ) evaluation assumed maximum temperature of 401 degrees F. It was also identified that the MSLB temperature has a longer exposure time than the EEQ temperature of approximately 160 seconds. However, no evaluation or analysis could be found to address why the original EEQ assumptions remained valid as the longer exposure time of the MSLB analysis could result in an adverse impact on environmentally qualified equipment. This condition was identified when Fort Calhoun Station was shutdown and defueled and entered into the station's corrective action program as Condition Report 2011-10129.

The condition identified on December 13, 2011, was initially reported via Event Notification (EN) No. 47900 as an unanalyzed condition (10 CFR 50.72(b)(3)(ii)(B)) on May 04, 2012. The initial LER submittal was made on July 23, 2012. These notifications were determined to have been made late. However, FCS subsequently performed a thermal lag analysis to determine the impact of the longer exposure time. The results show that the additional exposure time of the lower MSLB temperature does not adversely affect the EEQ analysis as originally assumed. Therefore, the original condition no longer represents a safety system functional failure and is being recharacterized as not reportable. For completeness, this event report has been updated and is being submitted as a voluntary LER.

**CONCLUSION**

The thermal lag analysis shows that the additional exposure time of the lower MSLB temperature did not adversely affect the EEQ analysis as originally assumed. Therefore, the condition is being recharacterized as not reportable.

**CORRECTIVE ACTIONS**

The results of the thermal lag analysis are being documented in the updated program basis documentation. The EEQ Harsh Files for the affected equipment have been revised.

**SAFETY SIGNIFICANCE**

The thermal lag analysis showed that the additional exposure time of the lower MSLB temperature did not adversely affect the EEQ analysis as originally assumed. Therefore, no reportable condition existed.

**SAFETY SYSTEM FUNCTIONAL FAILURE**

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

**PREVIOUS EVENTS**

None