



Omaha Public Power District

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

LIC-12-0105  
July 23, 2012

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

Reference: Docket No. 50-285

**Subject: Licensee Event Report 2012-009, Revision 0, for the Fort Calhoun Station**

Please find attached Licensee Event Report 2012-009, Revision 0, dated July 23, 2012. This report is being submitted pursuant to 10CFR50.73(a)(2)(ii)(B) and 10 CFR 50.73(a)(2)(v)(A), (B), (C) and (D).

The following commitment is being made in this letter:

Fort Calhoun Station will perform a thermal lag analyses for the Electrical Equipment Qualification Program equipment located within containment prior to plant startup.  
[AR 53395]

If you should have any questions, please contact me.

Sincerely,

D. J. Bannister  
Vice President and CNO

DJB /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  
INPO Records Center

# 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 205 55-0001, 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.

<b>1. FACILITY NAME</b> Fort Calhoun Station	<b>2. DOCKET NUMBER</b> 05000285	<b>3. PAGE</b> 1 OF 3
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**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
12	13	2011	2012	009	0	7	23	2012		05000
									FACILITY NAME	DOCKET NUMBER
										05000

<b>9. OPERATING MODE</b>  5	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §:</b> <i>(Check all that apply)</i>									
<b>10. POWER LEVEL</b>  0	<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)						
	<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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 <i>(Include Area Code)</i> 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
B	AB	EHTR	WATLOW	Y					

14. SUPPLEMENTAL REPORT EXPECTED				15. EXPECTED SUBMISSION DATE		
<input checked="" type="checkbox"/> YES <i>(If yes, complete 15. EXPECTED SUBMISSION DATE)</i> <input type="checkbox"/> NO				MONTH	DAY	YEAR
				12	18	2012

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

During the review of the current analysis of record for Main Steam Line Break (MSLB) inside containment, no analysis or evaluation could be found to address why the original Electrical Environmental Qualification (EEQ) evaluation of peak MSLB conditions remain valid. The current analysis of record establishes that containment temperatures remain above the Loss of Coolant Accident (LOCA) peak temperature for substantially longer (220 seconds versus 60 seconds) but at a lower temperature (347.9 degrees Fahrenheit vs. 401 degrees Fahrenheit). The longer dwell times could result in a more adverse impact on environmentally qualified equipment.

A cause analysis is being processed and the results will be reported in a supplement to this LER.

Fort Calhoun Station will perform thermal lag analyses for the Electrical Equipment Qualification Program equipment located within containment prior to plant startup. The LER will be supplemented with the information from the EEQ and cause analysis.

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

**NARRATIVE**

**BACKGROUND**

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

**EVENT DESCRIPTION**

FCS Condition Report (CR) 2011-10129, described a condition where equipment within the 10CFR50.49 (Equipment Qualification Rule) was not analyzed to the conditions defined in FCS calculation FC07054 Rev 1, "Containment Response Study of a Main Steam Line Break with GOTHIC," and created an unanalyzed condition. This condition was determined to be reportable as an unanalyzed condition which could prevent fulfillment of a safety function.

During the review of the current analysis of record for Main Steam Line Break (MSLB) inside containment, no analysis or evaluation could be found to address why the original Electrical Environmental Qualification (EEQ) evaluation of peak MSLB conditions remain valid. The current analysis of record in calculation FC07054 Rev 1 establishes that containment temperatures remain above the Loss of Coolant Accident (LOCA) peak temperature for substantially longer (220 seconds versus 60 seconds) but at a lower temperature (347.9 degrees Fahrenheit vs. 401 degrees Fahrenheit). The longer dwell time could result in a more adverse impact on environmentally qualified equipment.

This would impact both trains and a majority of the safety related equipment inside containment.

At 1513 Central Daylight Time (CDT) on May 4, 2012, an 8-hour notification was made to the Headquarters Operations office (HOO), under 10CFR50.72(b)(3)(ii)(B). This report is being made per 10CFR50.73(a)(2)(ii)(B) and 10 CFR 50.73(a)(2)(v)(A), (B), (C) and (D).

This LER reports a condition where equipment within 10 CFR 50.49, Equipment Qualification Rule, was not properly analyzed when the analysis of record was revised. The initial Operations review focused on the current operating conditions, noting that the condition would need to be resolved prior to start up. The station paradigm inappropriately concluded that reportability could be evaluated at a later date since current operating conditions were not challenged, and that the 60-day reporting window commenced when the event was determined to be reportable. In addition, FCS resources were focused on flood response and mitigation due to the extensive flooding that occurred along the Missouri River beginning in June 2011. FCS had declared an Unusual Event on June 6, 2011, due to rising river level and river projections, and resources were focused on flood response and asset protection. This condition was initially reported in Event Notification (EN) 47900 on May 4, 2012, at 1513 CDT. FCS has been systematically addressing issues that have been identified since June 2011, in response to the flooding conditions, switchgear fire, and increased oversight. This LER is being submitted beyond the 60-day regulatory reporting requirement due to non-conservative decisions with respect to procedural and regulatory reportability requirements and resource constraints caused by the operating challenges which began in June 2011.

**CONCLUSION**

A cause analysis is being processed and the results will be reported in a supplement to this LER.

**CORRECTIVE ACTIONS**

Fort Calhoun Station will perform thermal lag analyses for the Electrical Equipment Qualification Program equipment located within containment prior to plant startup. The LER will be supplemented with the information from the EEQ and cause analysis.

Additional actions will be tracked in the stations corrective action system.

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**NARRATIVE**

**SAFETY SIGNIFICANCE**

The safety significance of this event will be evaluated in the LER supplement following completion of the thermal lag analysis.

**SAFETY SYSTEM FUNCTIONAL FAILURE**

This event does result in a safety system functional failure in accordance with NEI-99-02.

**PREVIOUS EVENTS**

The station has not had any previous LERs for environmental qualification.