



Omaha Public Power District

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

10 CFR 50.73

LIC-15-0056
May 28, 2015

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

Fort Calhoun Station, Unit No. 1
Renewed Facility Operating License No. DPR-40
NRC Docket No. 50-285

Subject: Licensee Event Report 2015-002, Revision 0, for the Fort Calhoun Station

Please find attached Licensee Event Report 2015-002, Revision 0. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) and 50.73(a)(2)(v)(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
C. F. Lyon, NRC Senior Project Manager
S.M. Schneider, NRC Senior Resident Inspector

LICENSEE EVENT REPORT (LER)(See Page 2 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 and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollections.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
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Inoperable Auxiliary Feedwater System Due to Inadequate Procedure Change

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
04	02	2015	2015	002 - 00		05	28	2015	FACILITY NAME	DOCKET NUMBER
										05000
									FACILITY NAME	DOCKET NUMBER
										05000
9. OPERATING MODE		11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)								
1		<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 100		<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 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 type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> OTHER		
		<input type="checkbox"/> 20.2203(a)(2)(vi)		<input checked="" 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

LICENSEE CONTACT Erick Matzke	TELEPHONE NUMBER (Include Area Code) 402-533-6855
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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 <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE MONTH DAY YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

During a review of station procedures a station operator determined that during the performance of OP-ST-AFW-3009, "Auxiliary Feedwater Pump FW-6, Recirculation Valve, and Check Valve Tests," the restoration steps momentarily crosstie Main Feedwater (not safety related) with Auxiliary Feedwater system (safety related). During AFW system restoration a flowpath from the discharge of both the steam driven AFW pump (FW-10) and electric AFW pump (FW-6) is established to main feedwater. At the time of discovery the test was not being performed, however, the test had been performed during the last operating cycle.

The assessment and application of separation requirements in the associated procedures did not identify the cross tie methods and impacts due to reviewers not understanding piping class separation requirements.

AFW procedures were reviewed to ensure that other AFW procedures allow inappropriate lineups. Four (4) procedures were identified that aligned AFW in a similar manner. The use of the affected procedures has been administratively restricted until they can be corrected.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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		2015	- 002	- 00	

NARRATIVE**BACKGROUND**

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

EVENT DESCRIPTION

During a routine review of station procedures station personnel determined that when executing the procedure restoration steps of OP-ST-AFW-3009, "Auxiliary Feedwater Pump FW-6, Recirculation Valve, and Check Valve Tests," the procedure momentarily cross ties Main Feedwater (MFW) (not safety related) with Auxiliary Feedwater (AFW) system (safety related). During AFW system restoration a flowpath from the discharge of both the steam driven AFW pump (FW-10) and electric AFW pump (FW-6) is established to main feedwater. The test opens the pump discharge isolation valve prior to closing the MFW isolation valve.

This issue was found during the review of the procedure for scheduling. The AFW pumps discharge to a common header, therefore both pumps would be inoperable during this step of the procedure. At the time of discovery the test was not being performed, however, the test had been performed during the last operating cycle.

This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) and 50.73(a)(2)(v)(B).

CONCLUSION

OP-ST-AFW-3009 failed to maintain the AFW systems separate from non-safety related MFW systems when required by Technical Specifications. The failure to maintain qualified boundaries between the safety related system and non-safety related feedwater systems resulted in the AFW system being inoperable for a short period of time between opening the pump discharge valve and closing the MFW cross-connect valve.

Cause analysis determined that the assessment and application of separation requirements in the associated procedures did not identify the cross tie methods and impacts due to reviewers not understanding piping class separation requirements.

CORRECTIVE ACTIONS

FCS has conducted an extent of condition review to determine if other systems at the station were subject to similar issues with cross-connecting safety related systems to non-safety related systems and determined that the AFW system was unique in this aspect.

The AFW procedures were reviewed to ensure that other AFW procedures did not allow inappropriate lineups. Four (4) procedures were identified that aligned AFW in a similar manner. The use of the affected procedures has been administratively restricted until they can be corrected. None of the additional procedures identified by the extent of condition had been used when the AFW system was required to be operable by technical specifications.

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NARRATIVE**SAFETY SIGNIFICANCE**

Although the both AFW pumps were made inoperable by the testing procedure, the inoperability occurs while operators are actively engaged in realigning the system for normal operation. This lineup would have caused the pumps to feed the steam generators through both the main and auxiliary feedwater lines. The period of inoperability for the system is expected to be less than 10 minutes.

SAFETY SYSTEM FUNCTIONAL FAILURE

This does represent a safety system functional failure in accordance with NEI 99-02, revision 7.

PREVIOUS EVENTS

None