

10 CFR 50.73

LIC-15-0026 February March 27, 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 2015-001, Revision 0, for the Fort Calhoun Station

Please find attached Licensee Event Report 2015-001, Revision 0. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(ii)(B), unanalyzed condition. 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

o: NA 1

M. L. Dapas, NRC Regional Administrator, Region IV

C. F. Lyon, NRC Senior Project Manager

S.M. Schneider, NRC Senior Resident Inspector

NRC FORM 366 (02-2014)		U.S. NUCLEAR REGULATORY COMMISSION							APPROVED BY OMB: NO. 3150-0104 EXPIRES: 01/31/2017								
(VC-2V14)		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 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.								
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NRC FORM 366A (02-2014) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104

EXPIRES: 01/31/2017

# LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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 2055-0001, 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	2. DOCKET	(	6. LER NUMBER	3. PAGE			
Fort Calhoun Station	05000285	YEAR	SEQUENTIAL REV NUMBER NO.		0	OF	2
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#### NARRATIVE

## **BACKGROUND**

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

#### **EVENT DESCRIPTION**

On January 28, 2015, following a station initiated review of operability evaluations, it was determined that inadequate jet impingement protection for a penetration with an inadequate seal had been previously identified as part of station extent of condition reviews. This constituted an unanalyzed condition that had not been previously reported as required. The condition was initially identified on September 30, 2013. The station was shutdown and cooled down in mode 5 (refueling shutdown) at the initial time of discovery. The degraded condition was discovered during an extent of condition review of high energy line break (HELB) issues at the station initiated due to previously identified concerns. This issue and the other issues identified during the extent of condition review were corrected prior to plant heatup.

This report is being submitted pursuant to 10 CFR 50.73(a)(2)(ii)(B), Unanalyzed Condition.

## CONCLUSION

The station has reported several issues to the NRC concerning HELB issues identified at the station. These LERs include, 2012-009 (Inoperable Equipment due to Lack of Environmental Qualifications), 2012-015 (Electrical Equipment Impacted by High Energy Line Break Outside of Containment), 2012-017 (Containment Valve Actuators Design Temperature Ratings Below Those Required for Design Basis Accidents), 2013-011 (Inadequate Design for High Energy Line Break in Rooms 13 and 19 of the Auxiliary Building), 2013-015 (Unqualified Coating Used as a Water Tight Barrier in Rooms 81 and 82), 2013-016 (Reporting of Additional High Energy Line Break Concerns) and 2014-004 (Unqualified Limit Switches Render Safety Equipment Inoperable).

The Shift Manager that approved the Operability Evaluation believed that the reportability aspect of the penetration had been previously reported to the NRC and that no further report was required. The Shift Manager did not confirm that the reportability had been completed under another LER.

Portions of the HELB barrier between room 81 (steam and feed line room) and room 56 (switchgear room) were found degraded. Specifically, several areas under the main steam and feedwater lines in room 81 lacked adequate protection from jet impingement. These areas included penetration 557 and several small areas of the floor in room 81. The floor slab in room 81 is the ceiling of room 56.

## **CORRECTIVE ACTIONS**

The degraded jet impingement barriers were discovered as part of the extent of condition reviews for the Electrical Environmental Qualification (EEQ) Program Reconstitution Project. The deficiencies were properly remediated prior to plant startup in December 2013. All other HELB issues found as part of the extent of condition reviews were reviewed and no other cases of failing to report events were identified.

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Fort Calhoun Station	05000285	2015	- 001 -	00	3			

#### NARRATIVE

#### SAFETY SIGNIFICANCE

Jet impingement protection did not meet the requirements for proper HELB mitigation. As a result, some equipment may have been impacted during potential high energy line breaks in room 81. Room 81 contains the main steam lines and the main feedwater lines. The barrier may not have performed its function for those HELBs that resulted in jet impingement directly on the degraded portion of the barrier. Under these conditions, a postulated HELB had the potential to impact the ability of safety systems to respond to the accident.

#### SAFETY SYSTEM FUNCTIONAL FAILURE

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

### PREVIOUS EVENTS

2012-009 (Inoperable Equipment due to Lack of Environmental Qualifications), 2012-015 (Electrical Equipment Impacted by High Energy Line Break Outside of Containment), 2012-017 (Containment Valve Actuators Design Temperature Ratings Below Those Required for Design Basis Accidents), 2013-011 (Inadequate Design for High Energy Line Break in Rooms 13 and 19 of the Auxiliary Building), 2013-015 (Unqualified Coating Used as a Water Tight Barrier in Rooms 81 and 82), 2013-016 (Reporting of Additional High Energy Line Break Concerns) and 2014-004 (Unqualified Limit Switches Render Safety Equipment Inoperable)