

Fort Calhoun Station 9610 Power Lane Blair. NE 68008

> June 4, 2010 LIC-10-0035

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

Reference: Docket No. 50-285

Subject:

Licensee Event Report 2010-001 Revision 0 for the Fort Calhoun

Station

Please find attached Licensee Event Report 2010-001, Revision 0, dated June 4, 2010. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

The root cause information contained in this report is preliminary; therefore, the Omaha Public Power District plans to provide a supplement describing the final root cause by August 30, 2010. No regulatory commitments are contained in this submittal.

If you should have any questions, please contact me.

Sincerely,

Jeffrev A. Reinhart Site Vice President Fort Calhoun Station

JAR/epm

Attachment

E. E. Collins, NRC Regional Administrator, Region IV C:

L. E. Wilkins, NRC Project Manager

J. C. Kirkland, NRC Senior Resident Inspector

**INPO Records Center** 

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NRC FORM 366 (9-2007)			U.S. NUCLEAR REGULATORYCOMMISSION						ON API	APPROVED BY OMB: NO. 3150-0104 EXPIRES: 08/31/201						
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1. FACILITY NAME								2. [	OCKET NU							
Fort Calhoun Station									05000	<b>OF</b> 3						
4. TITLE Containment Integrity Violated During Performance of Leak Test																
5. EVENT DATE			6	7. REPORT DATE			DATE									
MONTH	DAY	YEAR	YEAR	SEQUENTI AL NUMBER	REV NO	MON H	T   C	DAY	YEAR	FACILITY N					DOCKET NUMBER 05000	
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9. OPER	9. OPERATING MODE 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)															
		□ 20.2201(b)			□ 20.2203(a)(3)(i)			)(3)(i)			(a)(2)(i)(C)		50.73	(a)(2)(vii)		
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İ			_	20.2203(a)(1)		□ 20.2203(a)(4)						(a)(2)(ii)(B)		50.73	(a)(2)(viii)(B)	
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

14. SUPPLEMENTAL REPORT EXPECTED

X YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☐ NO

Containment integrity was violated on November 1, 2009. This was a result of opening manual containment isolation valve SI-410 (Safety injection Tanks Fill/Drain Valve) when containment integrity was required and inadequate administrative controls were implemented.

15. EXPECTED

SUBMISSION

DATE

MONTH

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30

YEAR

2010

In preparation for performing a leak check of the safety injection tanks leakoff piping, a procedural step in the surveillance test opened manual containment isolation valve SI-410, as well as re-aligning other valves. The procedure prerequisites require the reactor coolant system to be pressurized above 600 psig, which results in the reactor coolant system being greater than 210 degrees F; thus, containment integrity is required.

Prior to the performance of the ST on November 1, 2009, it was recognized that the opening of SI-410 needed to be administratively controlled. The ST procedure was revised to require administrative controls be in place prior to opening containment isolation valve SI-410.

The root cause analysis for this event is still incomplete; however, the preliminary cause of this event is failure of previous reviewers of the test procedure to identify and resolve the conflict between required test conditions and opening SI-410.

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NRC FORM 366A (9-2007)	LICENSEE EVI CONTINU		U.S. NI	NUCLEAR REGULATORY COMMISSION			
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Fort Calhoun Station	05000285	YEAR	SEQUENTIAL NUMBER	REV NO.	,	OF 3	
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#### NARRATIVE

#### BACKGROUND

Containment integrity is defined in the Fort Calhoun Station (FCS) Technical Specifications (TS) as:

- (1) All non-automatic containment isolation valves which are not required to be open during accident conditions and blind flanges, except for valves that are open under administrative control as permitted by Specification 2.6(1)a, are closed.
- (2) The equipment hatch is properly closed and sealed.
- (3) The personnel air lock satisfies Specification 2.6(1)b.
- (4) All automatic containment isolation valves are operable, locked closed, or deactivated and secured in their closed position (or isolated by locked closed valves or blind flanges as permitted by a limiting condition for operation).
- (5) The uncontrolled containment leakage satisfies Specification 3.5, and
- (6) The sealing mechanism associated with each penetration (e.g., welds, bellows or O-rings) is operable.

# TS section 2.6(1)a, states:

"Containment integrity shall not be violated unless the reactor is in a cold or refueling shutdown condition. Without containment integrity, restore containment integrity within one hour or be in at least hot shutdown within the next 6 hours, in at least subcritical and less than 300 degrees F within the next 6 hours and in cold shutdown within the following 30 hours. Normally locked or sealed-closed valves (except for PCV-742A/B/C/D) may be opened intermittently under administrative control without constituting a violation of containment integrity."

The TS basis provides the following additional information:

"The opening of locked or sealed closed containment isolation valves on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with the control room, at the valve controls, (2) instructing this operator to close these valves in an accident situation, and (3) assuring that environmental conditions will not preclude access to close the valves and that this action will prevent the release of radioactivity outside the containment."

### **EVENT DESCRIPTION**

Containment integrity was violated on November 1, 2009. This was a result of opening manual containment isolation valve SI-410 (Safety injection Tanks Fill/Drain Valve) when containment integrity was required and inadequate administrative controls were implemented.

Prior to November 1, 2009, a step existed in QC-ST-SI-3006, "Safety Injection Leakoff Piping Forty Month Functional Test," to open manual containment isolation valve SI- 410 (Safety Injection Tanks Fill/Drain Valve), as well as re-aligning other valves, in preparation for performing a leak check of the safety injection tanks leakoff piping. The procedure prerequisites require the reactor coolant system be pressurized above 600 psig, which results in the reactor coolant system being greater than 210 degrees Fahrenheit and containment integrity required. Prior to the ST being performed on November 1, 2009, it was recognized by a shift manager that the opening of SI-410 needed to be administratively controlled in order to be in compliance with TS 2.6(1)a. However, this thought was in error since the TS bases prohibit this valve from being opened when the plant is greater than 210 degrees Fahrenheit.

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### NARRATIVE

On November 1, 2009, a revision was made to QC-ST-SI-3006. A note, a caution, and a step were added at the beginning of the procedure section to require that an operator be assigned to close manual containment isolation valve SI-410 when directed by the control room, to establish containment integrity. However, environmental conditions during an accident could preclude an operator from shutting SI-410 during an accident.

An extent of condition review from LER 2009-004 noted the violation of the TS basis information. The review determined that the station entered and subsequently violated TS 2.6(1)a on November 1, 2009, as a result of opening valve SI-410 when containment integrity was required.

This issue was identified and documented in Condition Report (CR) 2010-1664.

This event is being reported per 10 CFR 50.73(a)(2)(i)(B).

#### CONCLUSION

A root cause analysis is in progress and the results will be included in an update to the LER.

## CORRECTIVE ACTIONS

The completed root cause analysis will specify corrective actions to correct the root cause of this event.

### SAFETY SIGNIFICANCE

The safety significance of this event will be determined with the completed root cause analysis.

## SAFETY SYSTEM FUNCTIONAL FAILURE

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

## PREVIOUS SIMILAR EVENTS

LER 1988-011, LER 1991-027, LER 1992-002, LER 2008-002 and LER 2009-004

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