



Fort Calhoun Station  
P.O. Box 550,  
Fort Calhoun, NE 68023

LIC-10-0007  
February 2, 2010

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

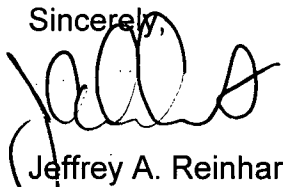
Reference: Docket No. 50-285

**Subject: Licensee Event Report 2009-004 Revision 0 for the Fort Calhoun Station**

Please find attached Licensee Event Report 2009-004, Revision 0, dated February 2, 2010. This report is being submitted pursuant to 10CFR50.73(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 April 23, 2010. If you should have any questions, please contact me.

Sincerely,



Jeffrey A. Reinhart  
Site Vice President  
Fort Calhoun Station

JAR/rda

Attachment

c: E. E. Collins, NRC Regional Administrator, Region IV  
L. E. Wilkins, NRC Senior Project Manager  
J. C. Kirkland, NRC Senior Resident Inspector  
INPO Records Center

JE22  
NRR  
4171

## 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 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-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

## 4. TITLE

Containment integrity was unknowingly violated during performance of Leak Test

## 5. EVENT DATE

MONTH	DAY	YEAR
11	26	2006

## 6. LER NUMBER

YEAR	SEQUENTI AL NUMBER	REV NO
2009	- 004 -	00

## 7. REPORT DATE

MONT H	DAY	YEAR
02	02	2010

## 8. OTHER FACILITIES INVOLVED

FACILITY NAME	DOCKET NUMBER
	05000
FACILITY NAME	05000

## 9. OPERATING MODE

3

## 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)   |
| <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 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

## 10. POWER LEVEL

0

## 12. LICENSEE CONTACT FOR THIS LER

## FACILITY NAME

Richard Acker

## TELEPHONE NUMBER (include Area Code)

402-533-6561

## 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

☒ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☐ NO15. EXPECTED  
SUBMISSION  
DATE

MONTH	DAY	YEAR
04	23	2010

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

Containment integrity was unknowingly violated on October 26, 2003, and November 26, 2006, as a result of opening manual containment isolation valve SI-410 (Safety injection Tanks Fill/Drain Valve). This occurred during a surveillance test (ST), when containment integrity was required and administrative controls (dedicated operator) were not implemented.

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

Prior to the subsequent 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.

LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Fort Calhoun Station	05000285	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2009 -	004	- 00	

## 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, it must be restored within one hour or the plant must be in at least hot shutdown within the next six hours, or be subcritical and less than 300 degrees F within the next six 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."

## EVENT DESCRIPTION

Containment integrity was unknowingly violated on October 26, 2003, and November 26, 2006. This was a result of opening manual containment isolation valve SI-410 (Safety injection Tanks Fill/Drain Valve) when containment integrity was required and administrative controls (dedicated operator) were not implemented.

Prior to November 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, 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 deg F and containment integrity being 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.

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 a dedicated operator be assigned to close manual containment isolation valve SI-410 (Safety injection Tanks Fill/Drain Valve) when directed by the control room, to establish containment integrity.

Nuclear Safety Review Group (NSRG) and System Engineering (SE) personnel performed a review of past performances of QC-ST-SI-3006. The review determined that the station unknowingly entered and subsequently violated TS 2.6(1)a on October 26, 2003 and November 26, 2006 as a result of opening valve SI-410 when containment integrity was required and administrative controls (dedicated operator) were not implemented.

This issue was identified and documented in Condition Report (CR) 2009-6365.

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CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Fort Calhoun Station	05000285	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 3
		2009 -	004 -	00	

**NARRATIVE**

**CONCLUSION**

Preliminarily, the cause of this event is failure of previous reviewers of the test procedure to identify and resolve the conflict between required test conditions (i.e., RCS temperature greater than 210 deg F and containment integrity required) and opening SI-410 (i. e., manual containment isolation valve).

**CORRECTIVE ACTIONS**

Procedure QC-ST-SI-3006 was revised to require that administrative controls be in place prior to opening containment isolation valve SI-410. The completed root cause analysis will specify any additional 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