



LIC-12-0133
September 10, 2012

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

Reference: Docket No. 50-285

Subject: Licensee Event Report 2012-014, Revision 0, for the Fort Calhoun Station

Please find attached Licensee Event Report 2012-014, Revision 0, dated September 10, 2012. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(v)(D), 10 CFR 50.73 (a)(2)(ii)(B) and 10 CFR 50.73(a)(2)(i)(B).

No commitments are being made in this letter.

If you should have any questions, please contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "LPC", is written over a light gray background.

Louis P. Cortopassi
Site Vice President

LPC/rjr/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

NRC FORM 366 (10-2010)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0104 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.	EXPIRES: 10/31/2013
<h2 style="margin: 0;">LICENSEE EVENT REPORT (LER)</h2> <p style="margin: 0;">(See reverse for required number of digits/characters for each block)</p>			

1. FACILITY NAME <div style="text-align: center;">Fort Calhoun Station</div>	2. DOCKET NUMBER <div style="text-align: center;">05000285</div>	3. PAGE <div style="text-align: center;">1 OF 4</div>
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4. TITLE <div style="text-align: center;">Containment Beam 22 Loading Conditions Outside of the Allowable Limits</div>
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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
07	11	2012	2012	- 014	- 0	09	10	2012	FACILITY NAME	DOCKET NUMBER 050000
									FACILITY NAME	DOCKET NUMBER 050000

9. OPERATING MODE <div style="text-align: center;">5</div>	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: <i>(Check all that apply)</i>				
10. POWER LEVEL <div style="text-align: center;">0</div>	<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 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 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 <div style="text-align: center;">Erick Matzke</div>	TELEPHONE NUMBER <i>(Include Area Code)</i> <div style="text-align: center;">402-533-6855</div>

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

14. SUPPLEMENTAL REPORT EXPECTED <input checked="" type="checkbox"/> YES <i>(If yes, complete 15. EXPECTED SUBMISSION DATE)</i> <input type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
		1	18	2013

ABSTRACT <i>(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)</i>
<p>On July 11, 2012, while performing the Extent of Condition for an existing Condition Report (CR) it was determined that Beam B-22, a structural member of the containment internal structure at the 1013 foot elevation, loading conditions were outside the allowable limits for both Working Stress and No Loss of Function load combinations as noted in the USAR Section 5.11. This condition was identified on July 11, 2011, while the unit was shutdown and reported to the U.S. Nuclear Regulatory Commission (NRC) Headquarters Operations Center the same day at approximately 1603 CDT under Event Notification Number 48094.</p> <p>A cause analysis is being evaluated and will be published in a supplement to this LER.</p>

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NARRATIVE

BACKGROUND

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

Limiting Condition for Operation (LCO)

2.6 Containment System

This LCO does not contain a specification stating the requirements related to the containment internal support structures. However, system such as the containment and safety injection rely on the containment support structures integrity to be maintained under accident conditions for each individual system to be OPEARABLE.

Operable – Operability is defined in the Technical Specifications (TS) as:

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power sources, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its specified safety functions(s) are also capable of performing their related support function(s).

The FCS Updated Safety Analysis Report (USAR), Section 5.11.3 Design Criteria - Class I Structures, Sub-section, a. Loadings states in part:

Class I structures were designed on the basis of working stress for the following load combinations:

$S = D + L$

$S = D + L + W$ or E

$S = D + F$

where:

S = Required section capacity

D = Dead load

L = Live load, including hydrostatic load

W = Wind load

E = Design earthquake

F = Hydrostatic load to elevation 1007 feet

The ACI Code 318-63 and the AISC Code for Structural Steel, 1963 edition, design methods and allowable stresses were used for reinforced concrete and steel structures, respectively.

The concrete structure within the containment was considered as a Class I structure and was subject to the loads and analysis noted above with the exception of wind and tornado loads. In addition, a transient analysis was made to determine the maximum differential pressure across the interior shielding and structural walls and floors. Openings in the interior concrete walls and floors are provided and grating floors are used wherever possible, without reducing the necessary shielding, to allow pressurization of all compartments with the minimal differential pressure across walls and floors.

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NARRATIVE

EVENT DESCRIPTION

On July 11, 2012, while performing the Extent of Condition for an existing Condition Report (CR) it was determined that Beam B-22, a structural member of the containment internal structure at the 1013 foot elevation, loading conditions were outside the allowable limits for both Working Stress and No Loss of Function load combinations as noted in the USAR Section 5.11. This condition was identified on July 11, 2011, while the unit was shutdown and reported to the U.S. Nuclear Regulatory Commission (NRC) Operations Center the same day at approximately 1603 CDT under Event Notification Number 48094.

This condition is being submitted pursuant to:

- 10 CFR 50.73(a)(2)(ii)(B), Any event or condition that resulted in the nuclear power plant being in an unanalyzed condition that significantly degraded plant safety.
- 10 CFR 50.73(a)(2)(i)(B), Any operation or condition which was prohibited by the plant's Technical Specifications.
- 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to: (D) Mitigate the consequences of an accident."

The condition described in this LER was identified in July 2012, but not promptly investigated as a reportable condition. 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. 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. This issue was placed in the stations corrective action system.

CONCLUSION

A cause analysis is being evaluated and will be published in a supplement to this LER.

CORRECTIVE ACTIONS

Compensatory measures were taken to ensure the loading on beam 22 was within calculated limits. Additional corrective actions will be determined following completion of the cause evaluation.

SAFETY SIGNIFICANCE

A cause analysis is being evaluated the safety significance will be published following the completion of the investigation.

SAFETY SYSTEM FUNCTIONAL FAILURE

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

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NARRATIVE

PREVIOUS EVENTS

A cause analysis is being evaluated and previous events will be determined following the completion of the evaluation.