



A. J. Camp, Jr
Plant Manager

March 6, 2014

WO 14-0022

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Docket No. 50-482: Licensee Event Report (LER) 2014-001-00, "Failure to Comply With Required Action of Technical Specification 3.4.3 While Performing a Vacuum Fill of the Reactor Coolant System"

Gentlemen:

The enclosed Licensee Event Report (LER) is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by Technical Specifications.

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4110, or Mr. Michael J. Westman at (620) 364-4009.

Sincerely,



A. J. Camp, Jr

AJC/rlt

Enclosure

cc: M. L. Dapas (NRC), w/e
C. F. Lyon (NRC), w/e
N. F. O'Keefe (NRC), w/e
Senior Resident Inspector (NRC), w/e

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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						2. DOCKET NUMBER			3. PAGE				
WOLF CREEK GENERATING STATION						05000 482			1 OF 3				
4. TITLE													
Failure to Comply With Required Action of Technical Specification 3.4.3 While Performing a Vacuum Fill of the Reactor Coolant System													
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			
01	06	2014	2014	- 001	- 00	03	06	2014	FACILITY NAME	DOCKET NUMBER			
									05000				
									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)	
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 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													
FACILITY NAME Michael Westman, Manager Regulatory Affairs									TELEPHONE NUMBER (Include Area Code) (620) 364-4009				
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									15. EXPECTED SUBMISSION DATE				
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO									MONTH DAY YEAR				

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

During a review of outside operating experience it was discovered that the Wolf Creek Generating Station (WCGS) had been in violation of Technical Specification 3.4.3, "RCS Pressure and Temperature (P/T) Limits." Limiting Condition of Operation 3.4.3 requires the Reactor Coolant System (RCS) pressure, temperature and heatup and cooldown rates be maintained within the limits specified in the Pressure/Temperature Limits Report (PTLR) at all times.

WCGS draws a vacuum on the RCS at the end of refueling outages to fill the RCS using procedure SYS BB-112, "Vacuum Fill of the RCS." The RCS heatup and cooldown limitations in the PTLR only specify a pressure to 0 psig. A vacuum was drawn on the RCS two times during the past three years which was outside the limitations contained in the PTLR.

The apparent cause is inadequate engineering evaluation and procedure reviews resulted in allowing operations below the heatup and cooldown limitations specified in the PTLR. Procedure SYS BB-112 was cancelled to ensure a vacuum is not drawn on the RCS.

NRC FORM 366A
(01-2014)

U.S. NUCLEAR REGULATORY COMMISSION



LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

APPROVED BY OMB: NO.3150-0104

EXPIRES: 01/31/2017

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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WOLF CREEK GENERATING STATION	05000 482	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2014 - 001 - 00			

NARRATIVE

PLANT CONDITIONS PRIOR TO THE EVENT

100 %

Mode 1

There were no structures, components or systems (SSC) that were inoperable at the start of the event and contributed to the event.

DESCRIPTION

During a review of outside operating experience on January 6, 2014, it was discovered that one utility received a non-cited violation of Technical Specification (TS), "Reactor Coolant System (RCS) Pressure and Temperature (P/T) Limits," for failure to comply with reactor pressure vessel pressure/temperature limits. The licensee had operated the plant with a vacuum in the reactor pressure vessel.

Wolf Creek Generating Station (WCGS) Technical Specification 3.4.3, "RCS Pressure and Temperature (P/T) Limits," Limiting Condition of Operation (LCO) 3.4.3 requires the RCS pressure, temperature and heatup and cooldown rates be maintained within the limits specified in the Pressure/Temperature Limits Report (PTLR). The Applicability for LCO 3.4.3 is "At all times." The RCS heatup and cooldown limitations in the PTLR only specify a pressure to 0 psig. WCGS draws a vacuum on the RCS [EIS: AB] at the end of refueling outages to fill the RCS, using procedure SYS BB-112, "Vacuum Fill of the RCS." During the performance of SYS BB-112, a vacuum is drawn on the RCS to between 20 inches Hg and 24 inches Hg.

A review of operating history for the last three years found that WCGS drew a vacuum on the RCS on May 8, 2011 and March 30, 2013.

REPORTABILITY

NUREG-1022, Event Reporting Guidelines, Section 3.2.2, "Operation or Condition Prohibited by Technical Specifications," specifies that a Licensee Event Report is required if a condition existed for a time longer than permitted by the TS even if the condition was not discovered until after the allowable time had elapsed and the condition was rectified immediately upon discovery. Events that occurred within 3 years of the date of discovery are reportable.

During the past 3 years, a vacuum was drawn on the RCS on May 8, 2011 and March 30, 2013, using procedure SYS BB-112. TS 3.4.3, "RCS Pressure and Temperature (P/T) Limits," LCO 3.4.3 requires the RCS pressure, temperature and heatup and cooldown rates be maintained within the limits specified in the PTLR. The Applicability for LCO 3.4.3 is "At all times." The RCS heatup and cooldown limitations in the PTLR only specify a pressure to 0 psig.

CONTINUATION SHEET

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NARRATIVE

Since the Applicability of TS 3.4.3 is "At all times," and the PTLR does not provide curves associated with a vacuum in the RCS, the plant was not operating in accordance with the TSs. Required Action C.1 requires initiating action to restore parameter(s) to within limits with a Completion Time of Immediately. Action was not taken during the performance of SYS BB-112 to restore parameter(s) immediately. TS 1.3, "Completion Times," defines Immediately as pursued without delay and in a controlled manner.

The events that occurred on May 8, 2011 and March 30, 2013 are reportable as an operation or condition prohibited by Technical Specifications pursuant to 10 CFR 50.73(a)(2)(i)(B).

CAUSE

The apparent cause is inadequate engineering evaluation and procedure reviews resulted in allowing operations below PTLR Curve Limits. WCGS implemented a change in the method to which the Reactor Coolant System is filled and vented following a refueling outage without verifying the change complied with Technical Specification 3.4.3. Implementation of vacuum fill and vent of the RCS at WCGS was evaluated in Engineering Evaluation EER 92-BB-02 and implemented by use of SYS BB-112 without reference to the fact that the PTLR curves do not have values less than 0 psig.

CORRECTIVE ACTIONS

Procedure SYS BB-112 was cancelled so a vacuum will not be drawn on the RCS.

SAFETY SIGNIFICANCE

In the development of SYS BB-112, Engineering Evaluation EER 92-BB-02 evaluated the effect of drawing a vacuum on the RCS. Precautions necessary to prevent any system or equipment degradation were incorporated into the procedure. As a result, the reduction in RCS pressure would not affect the integrity of the RCS components.

OPERATING EXPERIENCE/PREVIOUS EVENTS

None