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NLS2011079 August 9, 2011

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555-0001

Subject:

Licensee Event Report No. 2011-004-00

Cooper Nuclear Station, Docket No. 50-298, DPR-46

Dear Sir or Madam:

The purpose of this correspondence is to forward Licensee Event Report 2011-004-00.

; /

Sincerely,

Demetrius L. Willis

General Manager of Plant Operations

/jo

Attachment

cc: Regional Administrator w/attachment

USNRC - Region IV

NPG Distribution w/attachment

Cooper Project Manager w/attachment

USNRC - NRR Project Directorate IV-1

INPO Records Center w/attachment

Senior Resident Inspector w/attachment

**USNRC - CNS** 

SORC Chairman w/attachment

SRAB Administrator w/attachment

CNS Records w/attachment

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NRC FORM 366 (10-2010)		U.S. NUCLEAR REGULATORY COMMISSION						APPROVED BY OMB NO. 3150-0104 EXPIRES 10/31/2013						
<b>V</b>	•	LICE	(See reve	NSEE EVENT REPORT (LER) See reverse for required number of digits/characters for each block)					Estimated burden per response to comply with this mandatory information 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 FOIA/Privacy Service 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.					
1. FACILITY NAME								2.	. DO	DOCKET NUMBER			PAGE	
Cooper Nuclear Station						05000298			298		1 0	of 3		
4. TITLE Technical Specification Prohibited Condition for Non-Compliance with LCO 3.0.4														
5. E	VENT	DATE	T	6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES FACILITY NAME			LVED	a:
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10. POWER LEVEL 100			☐ 20. ☐ 20.	2203(a)(2)(iii) 2203(a)(2)(iv) 2203(a)(2)(v) 2203(a)(2)(vi)		50.36(c) 50.46(a) 50.73(a) 50.73(a)	(3)(ii) (2)(i)(A) (2)(i)(B)			50.73(a)(2)(v 50.73(a)(2)(v 50.73(a)(2)(v 50.73(a)(2)(v	r)(B) r)(C)	☐ 73.7′ ☐ OTH Specify	73.71(a)(4) 73.71(a)(5) OTHER Specify in Abstract below or in NRC Form 366A	
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14. SUPPLEMENTAL REPORT EXP							15. EXPECTED MC SUBMISSION DATE		MONTH	DAY	YEAR			
ABST	RACT	Limit to 1	400 spaces	s, i.e., approxim	ately 15 sin	gle-spaced	typewrit	ten lines	)					
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)  On June 13, 2011, while reviewing a post Refueling Outage 26 (RE26) report, it was discovered that Technical Specification (TS) Limiting Condition for Operation (LCO) 3.0.4.b was not complied with during startup from RE26.														
TS LCO 3.0.4.b requires, in part, "When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made: b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions" Cooper Nuclear Station changed from Mode 2 to Mode 1 while in an LCO for the Low Pressure Coolant Isolation (LPCI) subsystem "B" being inoperable without performing a risk assessment prior to changing modes.														
The root cause of this event was determined to be a deficient procedure that does not prompt operations to review all methods of LCO tracking to ensure that LPCI system LCOs related to Suppression Pool Cooling activities are closed prior to the change from Mode 2 to Mode 1. To prevent recurrence of this event, the procedure will be revised to prompt the reviews. As an interim action, a standing order was created that directs the reviews.  The safety significance of this event is negligible.														

## NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION

(10-2010)

# LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER		3. PAGE	
Cooper Nuclear Station	05000298	YEAR	SEQUENTIAL NUMBER	REV NO.	2 of 3
·		2011	04 -	- 00	

#### 17. NARRATIVE

#### PLANT STATUS

Cooper Nuclear Station (CNS) was in Mode 1, Power Operation, 100% power, at the time of discovery.

#### **BACKGROUND**

Emergency Core Cooling Systems (ECCS) [EIIS:BJ, BM, BO] are designed to limit fuel clad temperature over the complete spectrum of possible break sizes in the reactor coolant pressure boundary including the design basis break which is defined as the complete and instantaneous circumferential rupture of the largest pipe connected to the reactor vessel with displacement of the ends so that blowdown occurs from both ends.

The Low Pressure Coolant Injection (LPCI) [EIIS:BO] system is one of four systems that make up the ECCS. LPCI provides protection to the core for the case of a large break in the reactor coolant pressure boundary when level cannot be maintained and reactor vessel rapidly depressurizes. Protection extends to a small break in which the High Pressure Coolant Injection [EIIS:BJ] system is unable to maintain reactor water level and the Automatic Depressurization System [EIIS:RV] has operated to lower reactor vessel pressure. LPCI is one operational Mode of the Residual Heat Removal (RHR) [EIIS:BO] system.

The RHR system provides core cooling, in conjunction with other ECCS sub-systems and also provides containment cooling as required during abnormal operational transients and postulated accidents.

#### **EVENT DESCRIPTION**

During Refueling Outage 26 (RE26), at 20:42 Central Daylight Time (CDT) on May 7, 2011, RHR LPCI "B" was declared inoperable for Suppression Pool Cooling and torus water transfer. As a result, Technical Specification (TS) Limiting Condition for Operation (LCO) 3.5.1, ECCS - Operating, Condition A, was entered.

On May 8, 2011, the reactor mode switch was placed in "RUN" and Mode 1 was entered at 12:30 CDT.

On May 9, 2011, RHR LPCI "B" was declared operable at 00:33 CDT, and TS LCO 3.5.1, Condition A, was exited.

On June 13, 2011, while reviewing a post Refueling Outage 26 (RE26) report, it was discovered that TS LCO 3.0.4.b was not complied with during startup from RE26, in that a risk assessment was not performed prior to entering Mode 1.

TS LCO 3.0.4.b states, in part, "When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made: .....b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results,

#### NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) (10-2010) **CONTINUATION SHEET** 2. DOCKET 1. FACILITY NAME 6. LER NUMBER 3. PAGE REV YEAR SECUENTIAL 05000298 NUMBER NO. 3 of 3 Cooper Nuclear Station 2011 04 00

#### 17. NARRATIVE

determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate;...."

After identifying the condition, verification was made that RHR LPCI "B" subsystem was operating in Suppression Pool Cooling Mode at the time of Mode change.

As an interim action, a standing order was created that directs reviewing tracking systems to ensure that no conditions preventing entry into the desired Mode or condition exists.

An extent of condition review was performed of startups from previous outages for similar events. One event was discovered during startup from RE23, on November 22, 2006, in which Mode 1 was entered while RHR LPCI "B" was inoperable and aligned with Suppression Pool Cooling. Although the current risk evaluation requirement did not exist at that time, TS LCO 3.0.4 did not allow transitioning into a Mode or other specified condition without meeting the applicable LCOs.

#### **BASIS FOR REPORT**

This event is being reported as an operation or condition prohibited by plant TS per 10 CFR 50.73(a)(2)(i)(B).

### SAFETY SIGNIFICANCE

The overall risk significance of this event is low. The RHR "B" system was operating in Suppression Pool Cooling Mode and capable of being realigned to LPCI Mode if required. Although the LPCI Mode of RHR was considered inoperable, components aligned for Suppression Pool Cooling automatically re-align to LPCI upon receipt of a LPCI initiation signal. In addition, the RHR "A" system was available to perform its design function. Consequently, the safety significance is negligible.

#### **CAUSE**

CNS determined the root cause to be a deficient procedure that does not prompt operations to review all methods of LCO tracking to ensure that LPCI system LCOs related to Suppression Pool Cooling activities are closed prior to changing from Mode 2 to Mode 1.

## **CORRECTIVE ACTION**

To prevent recurrence of this event, CNS will revise the applicable procedure to prompt operations to check all LCO tracking methods for open LCOs prior to transitioning from Mode 2 to Mode 1.

## **PREVIOUS EVENTS**

There have been no events reported in the last 3 years related to non-compliance with TS LCO 3.0.4 during plant startups from outages.

ATTACHMENT 3	LIST OF REGULATORY	COMMITMENTS®4
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ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS@4

Correspondence Number: <u>NLS2011079</u>

The following table identifies those actions committed to by Nebraska Public Power District (NPPD) in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITMENT NUMBER	COMMITTED DATE OR OUTAGE
None		

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