



**Nebraska Public Power District**

*Always there when you need us*

NLS2011062

June 15, 2011

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

Subject: Licensee Event Report No. 2011-002-00  
Cooper Nuclear Station, Docket No. 50-298, DPR-46

Dear Sir or Madam:

The purpose of this correspondence is to forward Licensee Event Report 2011-002-00.

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

Lead  
NRR

**LICENSEE 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](mailto: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**

Cooper Nuclear Station

**2. DOCKET NUMBER**

05000298

**3. PAGE**

1 of 3

**4. TITLE**

Technical Specification Prohibited Condition Due to Past Operability of Service Water Booster Pump

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
04	17	2011	2011	- 002 -	00	06	15	2011		05000
9. OPERATING MODE 5			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)							
10. POWER LEVEL 000			<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							

**12. LICENSEE CONTACT FOR THIS LER**

FACILITY NAME

David W. Van Der Kamp, Licensing Manager

TELEPHONE NUMBER (Include Area Code)

(402) 825-2904

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

MONTH 08 DAY 01 YEAR 2011

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

On April 17, 2011, Cooper Nuclear Station (CNS) observed that the outboard oiler reservoir for Service Water Booster Pump (SWBP) B motor was low, and there was an oil sheen on the floor and motor. As a result, oil was added to the reservoir and SWBP B was concluded to be operable.

On April 27, 2011, the outboard oiler reservoir was discovered empty. Further investigation found that mounting bolts on the outboard motor bearing were loose causing a less-than-adequate seal between the machined surfaces of the outboard motor bearing housing halves. This inadequate seal had the potential to cause excessive oil usage in the outboard motor bearing.

After the oil was replenished on April 17, 2011, SWBP B was used during shutdown cooling until April 27, 2011, losing oil over the period of operation. SWBP B was subsequently declared inoperable and may have been inoperable since July 2010, when the SWBP B motor was installed.

This event is currently under investigation. CNS will provide a supplement to this Licensee Event Report.

(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	-- 002	-- 00	

**17. NARRATIVE****PLANT STATUS**

Cooper Nuclear Station (CNS) was in Mode 5, Refueling, at 0 percent power, at the time of the event.

**BACKGROUND**

The Residual Heat Removal [EIS:BO] Service Water Booster (RHRSWB) System is designed to provide cooling water for the Residual Heat Removal (RHR) System heat exchangers [EIS:HX], required for a safe reactor shutdown following a Design Basis Accident or transient. The RHRSWB System is operated whenever the RHR heat exchangers are required to operate in the shutdown cooling or suppression pool cooling mode.

The system is initiated manually from the control room. If operating during a loss of coolant accident (LOCA), the system is automatically tripped to allow the diesel generators [EIS:DG] to automatically power only that equipment necessary to reflood the core. The system is assumed in the analyses to be manually started 10 minutes after the LOCA.

The RHRSWB System removes heat from the suppression pool via the RHR System to limit the suppression pool temperature and primary containment [EIS:NH] pressure following a LOCA. This ensures that the primary containment can perform its function of limiting the release of radioactive materials to the environment following a LOCA.

The analyses assume that the RHRSWB System will provide adequate cooling support to the equipment required for safe shutdown. These analyses include the evaluation of the long term primary containment response after a design basis LOCA.

**EVENT DESCRIPTION**

On April 17, 2011, the outboard oiler reservoir [EIS:RVR] for Service Water Booster Pump (SWBP) B motor [EIS:MO] was observed to be low, and there was an oil sheen on the floor and motor. As a result, oil was added to the reservoir and SWBP B was concluded to be operable.

On April 27, 2011, the outboard oiler reservoir was discovered empty. Further investigation found that the outboard bearing housing cover mounting bolts were loose causing a less-than-adequate seal between the machined surfaces of the bearing housing halves, potentially causing excessive oil usage in the outboard motor bearing.

After the oil was replenished on April 17, 2011, SWBP B was used during shutdown cooling until April 27, 2011, losing oil over the period of operation. SWBP B was subsequently declared inoperable and may have been inoperable since July 2010, when the SWBP B motor was installed.

(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.	3 of 3
		2011	-- 002	-- 00	

**17. NARRATIVE**

This event is currently under investigation. CNS will provide additional event details, the safety significance, root cause, and corrective action(s) to prevent recurrence in a supplement to this Licensee Event Report.

**BASIS FOR REPORT**

This event is being reported as an operation or condition prohibited by plant Technical Specifications per 10 CFR 50.73(a)(2)(i)(B), because the SWBP B was potentially inoperable since July 2010.

**PREVIOUS EVENTS**

There have been no events reported in the past three years related to the SWBP B motor.

Correspondence Number: NLS2011062

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		