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NLS2017024
April 5, 2017

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

Subject: Licensee Event Report No. 2017-001-00
Cooper Nuclear Station, Docket No. 50-298, DPR-46

Dear Sir or Madam:

The purpose of this correspondence is to forward Licensee Event Report 2017-001-00.

There are no new commitments contained in this letter.

Sincerely,

Kenneth Higginbotham by K Hall 4/5/2017

Kenneth Higginbotham
Vice President Nuclear-
Chief Nuclear Officer

/jo

Attachment: Licensee Event Report 2017-001-00

cc: Regional Administrator w/attachment
USNRC - Region IV

Cooper Project Manager w/attachment
USNRC - NRR Plant Licensing Branch IV

Senior Resident Inspector w/attachment
USNRC - CNS

SRAB Administrator w/attachment

NPG Distribution w/attachment

INPO Records Center w/attachment
via ICES entry

SORC Chairman w/attachment

CNS Records w/attachment

IE22
NRR

COOPER NUCLEAR STATION
P.O. Box 98 / Brownville, NE 68321-0098
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www.nppd.com

NRC FORM 366 (11-2015) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018

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 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.

LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R 3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Cooper Nuclear Station	05000298	1 of 3

4. TITLE

Residual Heat Removal Minimum Flow Valves Out of Position Results in Loss of Safety Function and Condition Prohibited by Technical Specifications

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 05000
02	05	17	2017 -	001 -	00	04	05	17	FACILITY NAME	DOCKET 05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
1	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)	☐ 50.73(a)(2)(ix)(A)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
10. POWER LEVEL	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☒ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
100	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(C)	☐ 73.77(a)(1)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(i)
	☐ 20.2203(a)(2)(vi)	☒ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	☐ 73.77(a)(2)(ii)
		☐ 50.73(a)(2)(i)(C)	☐ OTHER Specify in Abstract below or in NRC Form 366A	

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT	TELEPHONE NUMBER (Include Area Code)
Jim Shaw, Licensing Manager	(402) 825-2788

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	TO EPIX
A	BO	V		Y					

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☒ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☐ NO		05	31	17

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

On February 5, 2017, during a quarterly sealed valve log audit, Residual Heat Removal (RHR) Valves RHR-V-58 and RHR-V-60 were discovered sealed closed. Normal configuration for these valves is sealed opened. Consequently, Operations declared RHR pumps A and C Inoperable at 0756 hours and entered Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.5.1 Condition A, LCO 3.6.1.9 Condition A, and LCO 3.6.2.3 Condition A.

Subsequently, the operating crew opened RHR-V-58 and RHR-V-60, independently verified the position of the valves and applied seals to the valves. As such, RHR pumps A and C were declared Operable at 1041 hours on February 5, 2017, and TS LCO 3.5.1 Condition A, LCO 3.6.1.9 Condition A, and LCO 3.6.2.3 Condition A were exited.

This is a Safety System Functional Failure.

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

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(11-2015)

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018

LICENSEE EVENT REPORT (LER)
(See Page 2 for required number of digits/characters for each block)

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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Cooper Nuclear Station	05000- 298	2017	- 001	- 00

NARRATIVE

PLANT STATUS

Cooper Nuclear Station was in Mode 1, Power Operations, at 100 percent power, at the time of discovery.

BACKGROUND

The safety objective of the Residual Heat Removal (RHR) system [EIIS:BO] is to provide core cooling, in conjunction with other Emergency Core Cooling Systems, and to provide containment cooling as required during abnormal operational transients and postulated accidents. The RHR system consists of two heat exchangers [EIIS:HX], four main system pumps [EIIS:P] in two divisions, and associated piping, valves, controls and instrumentation.

The motor-operated minimum flow valves automatically provide the necessary flow through the pump in order to prevent pump overheating. The manual isolation valves for the motor-operated minimum flow valves, RHR-V-58 and RHR-V-60, are normally configured open and sealed.

EVENT DESCRIPTION

On September 29, 2016, during Refueling Outage 29 (RE29), RHR-V-58 and RHR-V-60 were sealed closed and danger tagged in accordance with a clearance order to support the RHR Loop A Maintenance Window.

On October 7, 2016, the danger tags for RHR-V-58 and RHR-V-60 were released and the clearance order directed that both valves be restored to their normal configuration. The danger tags were removed and seals applied to the valves. However, the valves were not opened before placing the seals. Second verification incorrectly verified that the valves were sealed open, when they were sealed closed.

A quarterly sealed valve log audit was performed on November 29, 2016, and the seals were verified to be intact. The audit required only that the seals be verified, the audit did not require the valve configuration be checked.

On February 5, 2017, during a quarterly sealed valve log audit, it was discovered that RHR-V-58 and RHR-V-60 were sealed closed. Consequently, Operations declared RHR pumps A and C Inoperable at 0756 hours and entered Technical Specification (TS) Limiting Condition for Operation (LCO) 3.5.1 Condition A, LCO 3.6.1.9 Condition A, and LCO 3.6.2.3 Condition A.

Subsequently, the operating crew opened RHR-V-58 and RHR-V-60, independently verified the position of the valves and applied seals to the valves. As such, RHR pumps A and C were declared Operable at 1041 hours on February 5, 2017, and TS LCO 3.5.1 Condition A, LCO 3.6.1.9 Condition A, and LCO 3.6.2.3 Condition A were exited.

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Cooper Nuclear Station	05000- 298	2017	- 001	- 00

NARRATIVE

BASIS FOR REPORT

With the minimum flow isolated since October 7, 2016, this is reportable as a condition prohibited by Technical Specifications per 10 CFR 50.73(a)(2)(i)(B). In addition, during the time frame of inoperability, Division 2 RHR had also been inoperable on various occasions resulting in both divisions of RHR being inoperable, creating a loss of safety function per 10 CFR 50.73(a)(2)(v)(B).

The Safety Significance, Root Cause, Corrective Actions, and Previous Events will be provided in the supplemental report.