



Nebraska Public Power District

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NLS2006037

May 22, 2006

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

Subject: Licensee Event Report No. 2006-002-00
Cooper Nuclear Station, Docket 50-298, DPR-46

The purpose of this correspondence is to forward a Licensee Event Report.

Sincerely,

Stewart B. Minahan
General Manager of Plant Operations

/em

Enclosure

cc: Regional Administrator w/enclosure
USNRC - Region IV

Cooper Project Manager w/enclosure
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/enclosure
USNRC-CNS

NPG Distribution w/enclosure

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CNS Records w/enclosure

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IE22

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: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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 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
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4. TITLE
Scram Time Testing following Reactor Pressure Vessel Pressure Tests in Past Outages Violated Technical Specification

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
04	06	2003	2006	002	00	05	22	2006		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE 4	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (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 Paul V. Fleming, Licensing Manager	TELEPHONE NUMBER (Include Area Code) (402) 825-2774
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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				15. EXPECTED SUBMISSION DATE		
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE). <input checked="" type="checkbox"/> NO				MONTH	DAY	YEAR

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

On April 11, 2000, December 17, 2001, April 6, 2003 and on February 12, 2005, coming out of refuel outages RE19, RE20, RE21 and RE22, Cooper Nuclear Station (CNS) was in Mode 4 (Cold Shutdown) when CNS executed control rod scram time testing after the reactor pressure vessel class 1 leakage test was complete while coolant temperature was greater than 212 degrees Fahrenheit (F). Limiting Condition for Operation (LCO) 3.10.1 was applied in lieu of entering Mode 3 which violated LCO's 3.0.4 and 3.10.1. The impact of this on baseline core damage frequency is negligible due to the low level of decay heat, two trains of low pressure injection systems operable for makeup, higher than normal water inventory in the vessel, and Secondary Containment established. The cause was inadequate procedures. After adoption of Improved Technical Specifications, CNS failed to include in applicable procedures a caution to alert operators that continuing scram time testing above 212 F after hydrostatic test was completed could violate LCO 3.10.1. The procedural inadequacy was caused by a human error of not considering that performing other evolutions as part of hydrostatic testing under LCO 3.10.1 could conflict with the LCO. Those procedures were suspended until they are revised to clarify application of LCO 3.10.1, and include specific language that scram time testing can not be conducted under LCO 3.10.1 beyond completion of hydrostatic testing when reactor coolant temperature is greater than 212 F. CNS Corrective Action Program tracks these actions.

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17. NARRATIVE (If more space is required, use additional copies of Form 366A)

PLANT STATUS

On April 11, 2000 coming out of refuel outage RE19, on December 17, 2001 coming out of refuel outage RE20, on April 6, 2003, coming out of refuel outage RE21, and on February 12, 2005 coming out of refuel outage RE22, Cooper Nuclear Station (CNS) was in Mode 4 (Cold Shutdown) at zero per cent power when a condition prohibited by Technical Specifications occurred. CNS was in Mode 1 (Run) at 100 per cent power on March 24, 2006 when during document review the condition was discovered.

BACKGROUND

Prior to 1998, the term "hydrostatic testing" was used in the context of performing a number of tests on the reactor vessel [EIS:VSL]. These included American Society of Mechanical Engineers (ASME) Class 1 System Leakage Test (implemented by CNS Procedure 6.MISC.502); the ASME Class 1 Hydrostatic Test (Procedure 6.MISC.504); and the Control Rod [EIS:AA] Scram Time Evaluation, (Procedure 10.9.)

In 1998, Improved Technical Specifications (ITS) were approved and adopted at CNS. This included Limiting Condition for Operation (LCO) 3.10.1, which did not exist in the previous Technical Specifications (TS) used at CNS.

LCO 3.10.1 is applicable in Mode 4 with average reactor coolant temperature greater than 212 F. It states that the average reactor coolant temperature specified in TS Table 1.1-1 for Mode 4 may be changed to "NA" and operation considered not to be in Mode 3 (Hot Shutdown); and the requirements of LCO 3.4.8, "Residual Hear Removal (RHR) Shutdown Cooling System - Cold Shutdown," may be suspended, to allow performance of in-service leak or hydrostatic test provided specific Mode 3 LCO's are met for Secondary Containment [NG] Isolation and Standby Gas Treatment [BH]. LCO 3.10.1 is specific to hydrostatic testing. It does not apply to scram time testing, which had routinely been performed in conjunction with hydrostatic testing and extended beyond completion of hydrostatic testing prior to the adoption of the ITS.

In the first outage after adoption of ITS, RE18, the temperature of the reactor coolant did not exceed 212 degrees F during hydrostatic and leak testing, and LCO 3.10.1 was not applied. In RE19, RE20, RE21, and RE22, reactor coolant temperatures exceeded 212 F during in-service hydrostatic and leak tests, and LCO 3.10.1 was applied. As had been CNS practice previously, scram time testing was performed at the same time as hydrostatic and leak testing and extended beyond completion of hydrostatic testing with coolant temperature greater than 212 degrees F for RE19, RE20, RE21 and RE22.

EVENT DESCRIPTION

CNS executed control rod scram time testing after the reactor pressure vessel class 1 leakage test was complete in refueling outages RE19, RE20, RE21 and RE22 while in Mode 4 with reactor coolant temperature greater than 212 degrees F. The application of LCO 3.10.1 in lieu of entering Mode 3 violated LCO's 3.0.4 and 3.10.1.

BASIS FOR REPORT

This condition is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B), as a condition prohibited by Technical Specifications.

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SAFETY SIGNIFICANCE

The impact of this operation on baseline core damage frequency is negligible. Control Rod Scram Timing Test, when performed in conjunction with the in-service leak test, is conducted just before startup at the end of a refueling outage when the core decay heat level is low. Because of this low level of decay heat, the two trains of low pressure ECCS required to be operable per LCO 3.10.1 are adequate for makeup in the event of a leak.

Additionally, inventory in the vessel is much higher than normal. A leak during this high level condition would rapidly depressurize the vessel allowing low pressure injection. Secondary containment including Standby Gas Treatment is required to be established and operable by the LCO. This would mitigate any release to the environment due to leaks or line breaks.

CAUSE

The cause is deficient procedures. After the adoption of ITS in 1998, CNS did not modify the applicable procedures to warn operators about inadvertently violating the provisions of LCO 3.10.1 when reactor coolant was above 212 degrees F.

When procedures 6.MISC.502, 6.MISC.504, and 10.9 were modified to implement Improved Technical Specifications, it was presumed that the way hydrostatic testing had been done before, which had included scram time testing, would continue. LCO 3.10.1 was inappropriately interpreted in the context of hydrostatic test being an evolution that included other tests performed at the same time, including scram time testing.

CORRECTIVE ACTION

Immediate action taken included placing CNS procedures 6.MISC.502, 6.MISC.505 and 10.9 on administrative hold until the root cause investigation was complete and corrective actions were taken that prevent the condition.

The following corrective actions are being tracked in the CNS corrective action program.

Revise Procedures 6.MISC.502, 6.MISC.504 and 10.9 so that it is clear how and when to apply LCO 3.10.1 and include specific language that instructs operators that scram time testing can not be conducted under LCO 3.10.1 beyond completion of hydrostatic testing when the reactor coolant temperature is greater than 212 F.

PREVIOUS SIMILAR EVENTS

LER 2005-003, Both Diesel Generators (DG's) [EIS:DG] Inoperable in Mode 4 Leads to Condition Prohibited by TS, had a similar cause. The root cause was that Revision 16 of the surveillance procedure was inadequate in that it did not require or caution that performing procedure steps would render both DG's inoperable. The surveillance procedure was revised to correct the inadequacy.

LER 2003-003, Failure to Evaluate Heatup Rate Leads to TS Prohibited Operation, had a similar cause. This event was the result of inadequate procedural guidance for equalizing Reactor Coolant System (RCS) temperatures in preparation for starting an idle RR [EIS:AD] pump, and evaluating available RCS temperature data. Appropriate procedure revisions and the required evaluation were completed.

ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS©

Correspondence Number: NLS2006037

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		