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NINE MILE POINT
NUCLEAR STATION

August 02, 2012

U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Nine Mile Point Nuclear Station
Unit No. 2; Docket No. 50-410

Licensee Event Report 2012-003, Suppression Pool Level Below Technical Specification Limit During Mode Change

In accordance with 10 CFR 50.73(a)(2)(i)(B), please find attached Licensee Event Report 2012-003, Suppression Pool Level Below Technical Specification Limit During Mode Change.

Should you have questions regarding the information in this submittal, please contact John J. Dosa, Director Licensing, at (315) 349-5219.

Very truly yours,

MAP/KJK

Attachment: Licensee Event Report 2012-003, Suppression Pool Level Below Technical Specification Limit During Mode Change

cc:

NRC Project Manager
NRC Resident Inspector
NRC Regional Administrator

IE22
NRR

ATTACHMENT

LICENSEE EVENT REPORT 2012-003

SUPPRESSION POOL LEVEL BELOW TECHNICAL SPECIFICATION LIMIT DURING MODE CHANGE

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013

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 Section (T-5 F53), 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 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 reverse for required number of digits/characters for each block)

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4. TITLE

Suppression Pool Level Below Technical Specification Limit During Mode Change

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
									NA	NA
06	04	2012	2012	003	0	08	02	2012	FACILITY NAME: NA	DOCKET NUMBER: NA

9. OPERATING MODE

2

10. POWER LEVEL

000

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: *(Check all that apply)*

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☒ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
John J. Dosa, Director - Licensing	(315) 349-5219

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
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

14. SUPPLEMENTAL REPORT EXPECTED

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

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR
NA	NA	NA

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

On June 4, 2012, at 0517, Nine Mile Point Unit 2 (NMP 2) entered Mode 2 (startup) with suppression pool water level at 199.44 feet, below the minimum required level of 199.5 feet, per Technical Specification (TS) Limiting Condition for Operation (LCO) 3.6.2.2. Contrary to the requirements of LCO 3.0.1, the conditions for changing modes from Mode 4 (cold shutdown) to Mode 2 were not met when Mode 2 was entered. The low suppression pool level of 199.4 feet was discovered during shift checks on June 4, 2012 at 0846, when TS 3.6.2.2, Condition A was entered. Suppression pool water level was restored at 0926 and TS 3.6.2.2 Condition A was exited at 0933. The cause of this event is a failure to recognize abnormalities. The operators performing and verifying the Surveillance Requirements (SRs) and control room supervision reviewing the SRs did not recognize that little margin remained to the TS required lower level for suppression pool water level. Actions are being taken to communicate lessons learned from this event with operating crews for both units at Nine Mile Point Nuclear Station (NMPNS) with an emphasis on operator fundamentals of plant parameter monitoring and control. This event was entered into the NMPNS corrective action program (Condition Report CR-2012-005507).

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NARRATIVE

I. DESCRIPTION OF EVENT

A. PRE-EVENT PLANT CONDITIONS:

Prior to this event, Nine Mile Point Unit 2 (NMP2) was in Mode 4 (cold shutdown) with no inoperable systems affecting this event.

B. EVENT:

On June 4, 2012, at 0517, NMP2 entered Mode 2 (startup) with suppression pool water level at 199.44 feet, below the minimum required level of 199.5 feet, per Technical Specification (TS) Limiting Condition for Operation (LCO) 3.6.2.2, "Suppression Pool Water Level." Contrary to the requirements of LCO 3.0.1, the conditions for changing modes from cold shutdown to startup were not met when Mode 2 was entered.

There was no impact on Nine Mile Point Unit 1 (NMP1) from this event.

C. INOPERABLE STRUCTURES, COMPONENTS, OR SYSTEMS THAT CONTRIBUTED TO THE EVENT:

There were no inoperable components or systems that contributed to this event.

D. DATES AND APPROXIMATE TIMES OF MAJOR OCCURRENCES

5/31/2012; 0800 - Suppression pool level is 199.95 feet per computer point CMSLA02 (Suppression Pool Narrow Range Level). The control room log reading is 200 feet, taken from a separate level transmitter.

5/31 to 6/3/2012 - The shift checks log is completed between 0800 and 1000 for day shift and between 2000 and 2200 for night shift. The shift checks log documents completion of TS Surveillance Requirement (SR) 3.5.2.2.a. The shift checks log documents a lowering trend in suppression pool water level from 199.9 feet to 199.7 feet. SR 3.5.2.2.a verifies minimum suppression pool water level required for the High Pressure Core Spray (HPCS) System during Modes 4 and 5.

6/3/2012; 2000 - The shift checks log and daily checks log are started. Both of the logs record the suppression pool water level as 199.55 feet. The daily checks log documents completion of TS SR 3.6.2.2.1 to verify suppression pool water level is within limits during Modes 1, 2, and 3. The daily checks log has two notes; one noting that the surveillance was being performed in Mode 4, and the second noting that this surveillance is being performed in preparation for the mode change to Mode 2.

6/3/2012; 2152 - From Plant Information (PI) system data, the suppression pool water level, computer point CMSLA02, goes below 199.5 feet. This computer point is not the TS required shift checks log reading. NMP2 is in Mode 4 at this time. Per SR 3.5.2.2.a the required suppression pool water level for Mode 4 is greater than or equal to 195 feet. The higher level of greater than or equal to 199.5 feet is per SR 3.6.2.2.1, and required in Modes 1, 2 and 3.

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NARRATIVE

6/4/2012; 0517 - Reactor mode switch change from Mode 4 to Mode 2.

6/4/2012; 0846 - The shift checks log identified the suppression pool water level is 199.4 feet. The suppression pool water level is declared not within limits and TS 3.6.2.2, Condition A, Required Action A.1 is entered to restore suppression pool water level to within limits within 2 hours.

6/4/2012; 0906 - Started 2CSH*P1 (High Pressure Core Spray Pump) to restore suppression pool water level.

6/4/2012; 0926 - Secured 2CSH*P1 following suppression pool filling. Suppression pool water level is 199.9 feet.

6/4/2012; 0933 - Declared suppression pool water level within limits and exited TS 3.6.2.2, Condition A.

E. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED:

None

F. METHOD OF DISCOVERY:

At the time of discovery, June 4, 2012, at 0846, NMP2 was in Mode 2 with the reactor critical, below the point of adding heat, when the shift checks log identified suppression pool water level at 199.4 feet. The low suppression pool water level resulted in an unplanned entry into TS 3.6.2.2 Condition A to restore level within 2 hours. Based on a review of relevant information using control room logs and the PI system, there is firm evidence that the discrepancy existed before the time of discovery. PI data clearly shows a lowering trend of suppression pool water level for the preceding 4 days and indicates that the suppression pool water level was below 199.5 feet at the time the mode switch was changed from Mode 4 to Mode 2 on June 4, 2012, at 0517.

G. MAJOR OPERATOR ACTION:

Upon discovery of the condition, TS 3.6.2.2 Condition A was entered for suppression pool water level below 199.5 feet. Suppression pool water level was restored at 0926. TS 3.6.2.2 Condition A was exited at 0933.

H. SAFETY SYSTEM RESPONSES:

None. No operational conditions requiring the response of safety systems occurred as a result of this event.

II. CAUSE OF THE EVENT:

The cause of this event is a failure to recognize abnormalities. The surveillance performers, reviewers and verifiers failed to recognize that although suppression pool water level was within the required band, an abnormal trend existed based on data collected previously. The operators and control room supervision did not recognize that little margin remained to the TS required lower level for suppression pool water level for operation in Mode 2.

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This event was entered into the Nine Mile Point Nuclear Station (NMPNS) corrective action program (CR-2012-005507).

III. ANALYSIS OF THE EVENT:

This event is reportable in accordance with 10 CFR 50.73 (a)(2)(i)(B), as an operation or condition which was prohibited by the plant's Technical Specifications.

LCO 3.0.1 requires that LCOs shall be met during the MODES or other specified conditions in the Applicability. Contrary to the requirements of LCO 3.0.1, LCO 3.6.2.2, was not met on June 4, 2012, at 0517, when NMP2 entered Mode 2 with suppression pool water level below the minimum required level of 199.5 feet.

At the time of discovery on June 4, 2012 at 0846, TS 3.6.2.2, Required Action A.1 was entered and suppression pool water level was restored at 0926, within the required action completion time of 2 hours. The suppression pool water level was not within limits for 40 minutes from the time of discovery and 4 hours and 9 minutes from the time that Mode 2 was entered.

After the event, an evaluation of PI data and the shift checks log data was performed to determine suppression pool water level when NMP2 changed from Mode 4 to Mode 2 on June 4, 2012 at 0517. Minimum suppression pool water level for operation in Mode 2 is 199.5 feet. Evaluation of the PI data determined suppression pool water level was at 199.44 feet at the time of mode change. An evaluation of the shift checks log was performed and determined that suppression pool water level was at 199.47 feet at the time of mode change. Both sources of information provide firm evidence that suppression pool water level was below the required minimum limit at the time of mode change.

Per NUREG-1022, Revision 2, Section 3.2.2, an LER is required if a condition existed for a time longer than permitted by the technical specifications even if the condition was not discovered until after the allowable time had elapsed and the condition was rectified immediately upon discovery.

There were no actual safety consequences from this event. For the 4 hours and 9 minutes that suppression pool water level was below 199.5 feet in Mode 2, reactor coolant system temperature was not above 212 degrees Fahrenheit; thus the pressure suppression capability of the suppression pool would not have been challenged during a Loss of Coolant Accident. Steam was not being generated and a safety relief valve opening would not have challenged the design limit of the suppression pool.

The most probable cause of suppression pool water level lowering from May 31, 2012 to June 4, 2012 is leakage from 2RHS*MOV1B, the Residual Heat Removal (RHR) pump B suction valve from the suppression pool. From May 31, 2012 to June 4, 2012, 2RHS*MOV1B was closed and the RHR B subsystem was operating in the shutdown cooling mode of operation. 2RHS*MOV1B is normally open during Mode 2.

This event does not affect the NRC Regulatory Oversight Process (ROP) Index items.

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NARRATIVE

IV. CORRECTIVE ACTIONS:

A. ACTION TAKEN TO RETURN AFFECTED SYSTEMS TO PRE-EVENT NORMAL STATUS:

1. Restored suppression pool water level to 199.9 feet.

B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:

1. A communication will be developed for distribution to the NMP1 and NMP2 operating crews. The communication will discuss lessons learned from this event with an emphasis on operator fundamentals of plant parameter monitoring and control. The lessons learned will stress the importance of verifying margin to allowable limits when recording data, and monitoring for evidence of trends, so that preemptive action may be taken to prevent established limits from being exceeded.

2. Troubleshooting will be performed during the next outage to determine if leakage past 2RHS*MOV1B is present with the valve in the closed position. This troubleshooting is only able to be performed when the RHR B subsystem is in the shutdown cooling mode of operation.

V. ADDITIONAL INFORMATION:

A. FAILED COMPONENTS:

None

B. PREVIOUS LERs ON SIMILAR EVENTS:

None

C. THE ENERGY INDUSTRY IDENTIFICATION SYSTEM (EIIS) COMPONENT FUNCTION IDENTIFIER AND SYSTEM NAME OF EACH COMPONENT OR SYSTEM REFERRED TO IN THIS LER:

COMPONENT	IEEE 803 COMPONENT IDENTIFIER	IEEE 805 SYSTEM IDENTIFICATION
None	NA	NA

D. SPECIAL COMMENTS:

None