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CENGSM

a joint venture of



**NINE MILE POINT
NUCLEAR STATION**

July 12, 2013

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

ATTENTION: Document Control Desk

SUBJECT: Nine Mile Point Nuclear Station
Unit No. 1; Docket No. 50-220

Licensee Event Report 2013-001, Emergency Condenser 11 High Steam Flow Isolation Instrumentation Loss during Plant Startup

In accordance with 10 CFR 50.73(a)(2)(v)(D), please find attached Licensee Event Report 2013-001, Emergency Condenser 11 High Steam Flow Isolation Instrumentation Loss during Plant Startup.

There are no regulatory commitments in this submittal.

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

Very truly yours,

A handwritten signature in black ink, appearing to read "M. Philippon".

MAP/JBH

Attachment: Licensee Event Report 2013-001, Emergency Condenser 11 High Steam Flow Isolation Instrumentation Loss during Plant Startup.

cc: NRC Project Manager
NRC Resident Inspector
NRC Regional Administrator

JE22
NRC

ATTACHMENT

LICENSEE EVENT REPORT 2013-001

**EMERGENCY CONDENSER 11 HIGH STEAM FLOW ISOLATION
INSTRUMENTATION LOSS DURING PLANT STARTUP**

**Nine Mile Point Nuclear Station, LLC
July 12, 2013**

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

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.

1. FACILITY NAME Nine Mile Point Unit 1	2. DOCKET NUMBER 05000220	3. PAGE 1 OF 5
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4. TITLE
Emergency Condenser 11 High Steam Flow Isolation Instrumentation Loss during Plant Startup

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
05	14	2013	2013	001	00	07	12	2013	NA	NA
									FACILITY NAME	DOCKET NUMBER
									NA	NA

9. OPERATING MODE N	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)									
10. POWER LEVEL 003	<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 type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A							

12. LICENSEE CONTACT FOR THIS LER

NAME John J. Dosa, Director - Licensing	TELEPHONE NUMBER (Include Area Code) (315) 349-5219
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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
X	BL	ISV	Velan	Y					

14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	MONTH NA	DAY NA	YEAR NA
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On May 14, 2013, at 1145 hrs, with the reactor in the startup mode and at 3 percent thermal power, channel 11 high steam flow instrumentation for Emergency Condenser (EC) System Loop 11 alarmed due to a gross failure trip. Gross failure is a design feature to monitor for off normal electronic instrument loop component output. The failure of channel 11 high steam flow instrumentation occurred concurrently with channel 12 inoperable, resulting in the loss of EC System Loop 11 isolation capability on high steam flow.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(v)(D) as a condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

The cause of this event is leakage from the shared high pressure sensing line for transmitters DPT-36-06C and DPT-36-06D. The apparent cause of the leakage from the sensing line is leak by on instrument blowdown valves VLV-36-374 and VLV-89-72. Corrective actions include replacement of the instrument blowdown valves during the next refueling outage, equalizing the associated transmitters and allowing steam condensation to fill the lines, and the monitoring of output signals to ensure that the sensing lines remained full.

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NARRATIVE

I. DESCRIPTION OF EVENT

A. PRE-EVENT PLANT CONDITIONS:

Prior to the event, Nine Mile Point Unit 1 (NMP1) was conducting a reactor startup from the recently completed refueling outage, with reactor power approximately 3 percent.

B. EVENT:

On May 14, 2013, during reactor startup following the completion of refueling outage NIR22, NMP1 experienced both channels of high steam flow instrumentation on the EC System Loop 11 going into a gross fail condition. The channel 12 trip unit associated with transmitter DPT-36-06D went into gross fail and subsequently channel 11 trip unit associated with transmitter DPT-36-06C went into gross fail.

On May 14, 2013 at 1215 EC System Loop 11 was manually isolated in accordance with station operating procedures to comply with Technical Specifications (TS). TS 3.1.3.b was entered requiring EC System Loop 11 to be returned to an operable status within 7-days and the completion of TS surveillance requirement 4.1.3.f.

The transmitter equalizing valves for both transmitters were opened and subsequently closed to equalize the sensing lines static head. When this was done the respective trip unit readouts and voltage output readings returned to normal. Afterward, the voltage readings were monitored for a period of 12 hours to confirm that the instrument differential pressure remained normal and allowing steam condensation to fill the sensing lines. The EC System Loop 11 high steam flow instruments were declared operable followed by restoration of EC System Loop 11 to a standby condition and declaring it operable.

This event did not affect Nine Mile Point Unit 2.

An event notification was made in accordance with 10 CFR 50.72(b)(3)(v)(D) for the loss of EC Loop 11 isolation capability on high steam flow on May 14, 2013 at 1720 (EN# 49029).

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

Prior to the event, channel 12 high steam flow instrumentation on the EC System Loop 11 was inoperable.

D. DATES AND APPROXIMATE TIMES OF MAJOR OCCURRENCES:

May 14, 2013

0115 The reactor mode switch is placed in startup

0840 The gross fail set point is reached for EC System Loop 11 channel 12 steam flow differential pressure transmitter DPT-36-06D. TS Table 3.6.2.c note (f) action is entered for one channel less than the required minimum for one trip system, requiring the channel to be placed in a trip condition within 24 hours.

1145 The gross fail setpoint is reached for EC System Loop 11 channel 11 steam flow differential pressure transmitter DPT-36-06C. TS Table 3.6.2.c note (f) action is entered for one channel less

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than the required minimum for both trip systems. The action requires tripping one channel within an hour and tripping the remaining channel within 24 hours, or alternatively to take the action of TS 3.6.2.a (3), which requires declaring the affected EC System Loop 11 inoperable and taking the action of TS 3.1.3.b.

1215 EC System Loop 11 is isolated. TS 3.1.3.b is entered.

1500 Both transmitters were equalized, the readings returned to normal, and gross fail alarms reset. Monitoring for 12 hours commenced.

May 15, 2013

0600 EC System Loop 11 high steam flow instrumentation is declared operable. TS Table 3.6.2.c note (f) actions are exited.

0612 EC System Loop 11 is restored to a standby lineup. The system is declared operable and TS 3.1.3.b is exited.

E. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED:

No other systems or functions were affected.

F. METHOD OF DISCOVERY:

On May 14, 2013 at 1145 the control room received Reactor Protection System Analog Trip System (RPS ATS) trouble light for channel 11.

G. MAJOR OPERATOR ACTION:

Operators initiated TS actions resulting in isolating the EC System Loop 11. Following troubleshooting and execution of a confidence run, EC System Loop 11 high steam flow instrumentation system was declared operable, followed by returning EC System Loop 11 to a standby configuration.

H. SAFETY SYSTEM RESPONSES:

No operational conditions requiring the response of safety systems occurred as a result of this event.

II. CAUSE OF EVENT:

The cause of the failure of channel 11 and 12 high steam flow instrumentation for EC System Loop 11 is leakage from the shared high pressure sensing line for differential pressure transmitters DPT-36-06C and DPT-36-06D. The apparent cause of the leakage in the transmitter high pressure sensing line is leak by on instrument blowdown valves VLV-36-374 and VLV-89-72.

This event has been entered into the Nine Mile Point Nuclear Station corrective action program as condition report number CR-2013-004347.

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III. ANALYSIS OF THE EVENT:

The event is reportable in accordance with 10 CFR 50.73(a)(2)(v)(D) as a condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

There were no actual nuclear safety consequences associated with this event. The event was caused by leakage in the shared high pressure sensing line for differential pressure transmitters, resulting in both channels of high steam flow instrumentation for the EC System Loop 11 being declared inoperable. Although EC System Loop 11 was manually isolated, the conditions satisfying the automatic initiation of the EC System Loop 11 were not present, and no automatic isolation due to high steam flow was required.

The safety function of the EC High Steam Flow instruments (DPT-36-06C and DPT-36-06D) is to isolate EC System Loop 11 in the event of an EC System Loop 11 steam leak. Each of these transmitters monitors steam flow to the EC System Loop 11 and each provides an isolation signal on high steam flow indicative of a line break. Normally, with no steam flow, as is the case with the EC in a standby configuration, the differential pressure seen by the transmitters is approximately zero. The sensing lines are a static column of water from the transmitters to where the instrument lines connect to the steam flow elbow. During normal operation, any minor leakage from the sensing lines is made up from condensation from the steam line to both the low and high pressure sensing lines.

The trip unit gross fail function is a design feature to monitor for an off-normal electronic instrument loop component output. For both of these trip units, the signal at the trip unit was reading low and the gross fail could not be reset. A low output signal is non-conservative in that the high steam flow isolation may not occur when required by design. A low output reading is indicative of a lowered high pressure instrument line water column.

The amount of seat leakage has been evaluated for consideration of impact on containment requirements. The total leakage remains well within the allowable value to meet 10CFR50 Appendix J requirements. The leakage, if internal to the drywell, is monitored as part of the floor drain leak rate criteria, as required by Technical Specifications.

Currently the instrument loops are operable with any minor leakage being maintained by condensing steam as designed. The instruments are calibrated and will perform their isolation function.

Based on the above discussion, it is concluded that the safety significance of this event is low and the event did not pose a threat to the health and safety of the public or plant personnel.

This event affects the NRC Reactor Oversight Process (ROP) Performance Indicators (PIs) for NMP1 Safety System Functional Failures (SSFF). The SSFF PI will increase from 4 to 5 and remains green. The green to white threshold for this PI is greater than 6. No other NRC performance indicators were impacted by this event.

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IV. CORRECTIVE ACTIONS:

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

1. Transmitters DPT-36-06C and DPT-36-06D were equalized via the equalizing valve and the trip units verified to be reading normally.
2. EC System Loop 11 was returned to a standby lineup.

B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:

1. A drywell walkdown of the high pressure sensing line for differential pressure transmitters DPT-36-06C and DPT-36-06D was performed on July 9, 2013, during the recent planned outage confirming that there are no leaks from the sensing line into the drywell.
2. An interim methodology has been developed and is being implemented to monitor the operability of the transmitters DPT-36-06C and DPT-36-06D instrument loops for times when the instrument is required by TS and there is no reactor steam for instrument line makeup.
3. Replace instrument blowdown valves VLV-36-374 and VLV-89-72 during the next refueling outage at NMP1.

V. ADDITIONAL INFORMATION:

A. FAILED COMPONENTS:

There were no other failed components that contributed to this event.

B. PREVIOUS LERs ON SIMILAR EVENTS:

There were no previous LERs on similar events.

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

<u>COMPONENT</u>	<u>IEEE 803 FUNCTION IDENTIFIER</u>	<u>IEEE 805 SYSTEM IDENTIFICATION</u>
Reactor Protection System	N/A	JC
EC System Differential Pressure Transmitter	PDT	BL

D. SPECIAL COMMENTS:

None