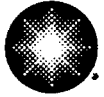


James A. Hutton
Plant General Manager

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315.349.4308 Fax



Constellation Energy

• Nine Mile Point Nuclear Station

August 11, 2006

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 06-002, "HPCI Logic Actuation due to Turbine Trip"

In accordance with 10 CFR 50.73(a)(2)(iv)(A), we are submitting Licensee Event Report 06-002, "HPCI Logic Actuation due to Turbine Trip."

Should you have questions regarding the information in this submittal, please contact M. H. Miller, Licensing Director, at (315) 349-1510.

Very truly yours,

JAH/KSE/sac

Attachment: (1) Licensee Event Report

cc: S. J. Collins, NRC Regional Administrator, Region I
L. M. Cline, NRC Senior Resident Inspector

IE22

ATTACHMENT (1)

LICENSEE EVENT REPORT (LER)

NRC FORM 366 (6-2004)			U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB: NO. 3150-0104			EXPIRES: 06/30/2007														
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: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send 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 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 4														
4. TITLE HPCI Logic Actuation Due To Turbine Trip																							
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										
06	12	2006	2006	- 002 -	00	08	11	2006	FACILITY NAME				DOCKET NUMBER										
9. OPERATING MODE <div style="text-align: center; font-size: 1.2em;">N</div>			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)																				
10. POWER LEVEL <div style="text-align: center; font-size: 1.2em;">000</div>			<table style="width:100%; border: none;"> <tr> <td style="width: 25%; vertical-align: top;"> <input type="checkbox"/> 20.2201(b) <input type="checkbox"/> 20.2201(d) <input type="checkbox"/> 20.2203(a)(1) <input type="checkbox"/> 20.2203(a)(2)(i) <input type="checkbox"/> 20.2203(a)(2)(ii) <input type="checkbox"/> 20.2203(a)(2)(iii) <input type="checkbox"/> 20.2203(a)(2)(iv) <input type="checkbox"/> 20.2203(a)(2)(v) <input type="checkbox"/> 20.2203(a)(2)(vi) </td> <td style="width: 25%; vertical-align: top;"> <input type="checkbox"/> 20.2203(a)(3)(i) <input type="checkbox"/> 20.2203(a)(3)(ii) <input type="checkbox"/> 20.2203(a)(4) <input type="checkbox"/> 50.36(c)(1)(i)(A) <input type="checkbox"/> 50.36(c)(1)(ii)(A) <input type="checkbox"/> 50.36(c)(2) <input type="checkbox"/> 50.46(a)(3)(ii) <input type="checkbox"/> 50.73(a)(2)(i)(A) <input type="checkbox"/> 50.73(a)(2)(i)(B) </td> <td style="width: 25%; vertical-align: top;"> <input type="checkbox"/> 50.73(a)(2)(i)(C) <input type="checkbox"/> 50.73(a)(2)(ii)(A) <input type="checkbox"/> 50.73(a)(2)(ii)(B) <input type="checkbox"/> 50.73(a)(2)(iii) <input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A) <input type="checkbox"/> 50.73(a)(2)(v)(A) <input type="checkbox"/> 50.73(a)(2)(v)(B) <input type="checkbox"/> 50.73(a)(2)(v)(C) <input type="checkbox"/> 50.73(a)(2)(v)(D) </td> <td style="width: 25%; vertical-align: top;"> <input type="checkbox"/> 50.73(a)(2)(vii) <input type="checkbox"/> 50.73(a)(2)(viii)(A) <input type="checkbox"/> 50.73(a)(2)(viii)(B) <input type="checkbox"/> 50.73(a)(2)(ix)(A) <input type="checkbox"/> 50.73(a)(2)(x) <input type="checkbox"/> 73.71(a)(4) <input type="checkbox"/> 73.71(a)(5) <input type="checkbox"/> OTHER <div style="font-size: 0.8em;">Specify in Abstract below or in NRC Form 366A</div> </td> </tr> </table>												<input type="checkbox"/> 20.2201(b) <input type="checkbox"/> 20.2201(d) <input type="checkbox"/> 20.2203(a)(1) <input type="checkbox"/> 20.2203(a)(2)(i) <input type="checkbox"/> 20.2203(a)(2)(ii) <input type="checkbox"/> 20.2203(a)(2)(iii) <input type="checkbox"/> 20.2203(a)(2)(iv) <input type="checkbox"/> 20.2203(a)(2)(v) <input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 20.2203(a)(3)(i) <input type="checkbox"/> 20.2203(a)(3)(ii) <input type="checkbox"/> 20.2203(a)(4) <input type="checkbox"/> 50.36(c)(1)(i)(A) <input type="checkbox"/> 50.36(c)(1)(ii)(A) <input type="checkbox"/> 50.36(c)(2) <input type="checkbox"/> 50.46(a)(3)(ii) <input type="checkbox"/> 50.73(a)(2)(i)(A) <input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(i)(C) <input type="checkbox"/> 50.73(a)(2)(ii)(A) <input type="checkbox"/> 50.73(a)(2)(ii)(B) <input type="checkbox"/> 50.73(a)(2)(iii) <input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A) <input type="checkbox"/> 50.73(a)(2)(v)(A) <input type="checkbox"/> 50.73(a)(2)(v)(B) <input type="checkbox"/> 50.73(a)(2)(v)(C) <input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 50.73(a)(2)(vii) <input type="checkbox"/> 50.73(a)(2)(viii)(A) <input type="checkbox"/> 50.73(a)(2)(viii)(B) <input type="checkbox"/> 50.73(a)(2)(ix)(A) <input type="checkbox"/> 50.73(a)(2)(x) <input type="checkbox"/> 73.71(a)(4) <input type="checkbox"/> 73.71(a)(5) <input type="checkbox"/> OTHER <div style="font-size: 0.8em;">Specify in Abstract below or in NRC Form 366A</div>					
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12. LICENSEE CONTACT FOR THIS LER																							
NAME Mary H. Miller, Licensing Director										TELEPHONE NUMBER (Include Area Code) (315) 349-1510													
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														
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	DAY	YEAR											
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)																							
<p>On June 12, 2006, with Nine Mile Point Nuclear Station (NMPNS) Unit 1 reactor plant in the Startup mode at 0% power, 5 psig and 192 degrees Fahrenheit, reactor water level increased to the high level trip setpoint when plant operators placed the Feedwater system in the long path recirculation configuration to support chemistry sampling. This resulted in a valid Main Turbine Trip signal and actuation of the High Pressure Coolant Injection (HPCI) initiation logic. HPCI is a mode of operation that uses selected equipment of the condensate and feedwater system to perform its function. At the time of the event, HPCI was not required to be operable with reactor pressure less than 110 psig. In accordance with operating procedures, the feedwater booster pumps were not required to be in service and their control switches were in pull-to-lock. Without the booster pumps running, the feedwater pumps' start permissive circuitry is not satisfied. Therefore, though the HPCI start logic was actuated, injection did not occur and was not required.</p> <p>The cause of this event is inadequate implementation of previous operating experience. Similar level control problems occurred in the past without the lessons learned incorporated into operating procedures to warn operators of possible consequences.</p> <p>To prevent recurrence, the applicable operating procedure will be revised to establish the proper sequence for placing the Feedwater system in long path recirculation configuration during plant startup and a precaution will be added to alert operators about potential reactor level control problems.</p>																							

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Nine Mile Point Unit 1	05000220	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
		2006	-- 002	-- 00	

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

I. Description of Event

On June 12, 2006, with Nine Mile Point Nuclear Station (NMPNS) Unit 1 reactor plant in the Startup mode at 0% power, 5 psig and 192 degrees Fahrenheit, reactor water level increased to the high level trip setpoint when plant operators placed the Feedwater system in the long path recirculation configuration to support chemistry sampling. This resulted in a valid Main Turbine Trip and actuation of the High Pressure Coolant Injection (HPCI) initiation logic.

HPCI is a mode of operation of the condensate and feedwater system. The HPCI mode of feedwater operation consists of selected equipment, including the condensate surge and storage tanks, main condenser hotwell, two condensate pumps, condensate demineralizers, two feedwater booster pumps, feedwater heaters, two motor-driven feedwater pumps, an integrated control system, and all associated piping and valves. To ensure a continuous, uninterrupted supply of high pressure feedwater to the reactor, HPCI is auto-initiated by reactor vessel low level, a turbine trip, or excessive flow through an individual feedwater pump. At the time of the event, during the plant start up, HPCI was not required to be operable with reactor pressure less than 110 psig.

As a regular practice, the feedwater system is placed in the long path recirculation configuration during plant startup to filter reactor feedwater and support collecting a chemistry sample prior to initiating high feedwater flows to the Reactor. The Feedwater system remained lined up for long path recirculation from the plant shutdown activities and required the opening of only one valve to initiate the flow path.

When the operator slowly cracked open the valve to place the Feedwater system in long path recirculation configuration, no changes in reactor level, feedwater flow, or feedpump bypass valve position were observed. When the valve was opened further (approximately 20%), a level rise greater than anticipated occurred. Level reached the reactor high level setpoint, resulting in a Main Turbine Trip and actuation of the HPCI initiation logic, per design.

Due to the operating conditions during plant start up, the feedwater booster pumps were not required to be in service at the time of the event and the control switches were in pull-to-lock. Without the booster pumps running, the feedwater pumps' start permissive circuitry is not satisfied. Therefore, though the HPCI start logic was actuated, injection did not occur and was not required.

The source of water that caused the high level condition in the reactor came from the elevated portions of the feedwater system that gravity-drained to the reactor vessel (at ~5 psig) when the FCV was opened.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Nine Mile Point Unit 1	05000220	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 4
		2006	-- 002	-- 00	

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

II. Cause of Event

The cause of this event is inadequate implementation of previous operating experience. Similar level control problems occurred in the past without the lessons learned incorporated into operating procedures to warn operators of possible consequences.

A contributing cause was an inadequate pre-job brief. The pre-job brief did not adequately consider the potential consequences of reactor water level control issues.

III. Analysis of Event

A review of plant data showed that reactor water level rose approximately 7" from 81"-83" to a high of 90". Hotwell temperature at the time of the event was 68.5 degrees with reactor water temperature at ~192 degrees. The reactor was subcritical. There was no change in indicated reactor power or in reactor coolant temperature as a result of the water that gravity-drained to the reactor vessel (at 5 psig) from the elevated portions of the feedwater system.

The plant impact associated with the rise in level was annunciation and circuit actuation of the HPCI auto initiation logic from a Turbine Trip signal, as designed. No components started, no water flowed to the reactor, no challenges to operators or the plant other than alarm response actions and reset of the turbine to support plant startup. At the time of the event, during the plant start up, HPCI was not required to be operable with reactor pressure less than 110 psig.

Based on the above, the event did not pose a significant threat to the health and safety of the public or plant personnel.

IV. Corrective Actions

A. Action Taken to Return Affected Systems to Pre-Event Normal Status

Immediate actions were taken to place reactivity maneuvers on hold, reset HPCI, and restore reactor water level to the operating band. Due to plant conditions, no further actions were required.

B. Action Taken or Planned to Prevent Recurrence

NOTE: There are no NRC regulatory commitments in this Licensee Event Report.

To prevent recurrence, the applicable operating procedures will be revised to establish the proper sequence for placing the Feedwater system in the long path recirculation configuration during plant startup and a precaution will be added to alert operators about potential reactor water level control problems. In addition, Unit 1 licensed operators will be briefed on this event.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Nine Mile Point Unit 1	05000220	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 4
		2006	-- 002 --	00	

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

V. Additional Information

A. Failed Components:

None

B. Previous similar events:

Similar level control events with the plant in cold shutdown and the reactor vented to atmosphere have occurred without resulting in a turbine trip (reactor water level did not rise excessively or the turbine trip was not reset) and therefore did not actuate HPCI logic. For these events operators failed to incorporate lessons learned into operating procedures to warn operators of possible consequences.

In 1997, two similar events occurred where HPCI logic was actuated when unplanned reactor water level increases initiated a turbine trip and actuated HPCI logic. The cause of the first event on July 11, 1997, was attributed to component failure of valves not involved in this recent event. The cause of the second event on December 7, 1997, was attributed to operator error in that operating parameters were not adequately monitored, allowing reactor water level to increase to the high level trip point. Because the specific causes of the three events are different, previous corrective actions were not designed to prevent this recent event.

C. Identification of components referred to in this Licensee Event Report:

<u>Components</u>	<u>IEEE 805 System ID</u>	<u>IEEE 803A Function</u>
Feedwater System/Booster Pump	SJ	P
Feedwater Isolation Valve	SJ	ISV
Feedwater Flow Control Valve	SJ	FCV
High Pressure Coolant Injection (HPCI) System	BJ	--
HPCI Initiation Logic	JG	--
Reactor Vessel	--	RPV
Main Turbine/Supervisory Control	JJ	TRB