



LR-N04-0594

JAN 07 2005

U. S. Nuclear Regulatory Commission  
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**SPECIAL REPORT 354/04-013-00  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE NO. NPF-57  
DOCKET NO. 50-354**

This Special Report is being submitted pursuant to the requirements of Hope Creek Technical Specification (TS) 3.5.1, Action g. TS 3.5.1. Action g states:

"In the event an ECCS system is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70."

On October 10, 2004, the reactor was scrammed due to a steam leak (pipe failure) in the turbine building. As discussed in LER 354/2004-010-00 dated December 9, 2004, following the manual scram of the reactor, condenser vacuum began to degrade. Operators began to reduce reactor vessel pressure using the turbine bypass valves to allow for use of the secondary condensate pumps for reactor water level control. Due to the continued degradation of condenser vacuum, the reactor feedwater pumps tripped. Actions were taken to transition reactor vessel water level and pressure control to the High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) systems. The Control Room Supervisor (CRS) directed the reactor operator to close the turbine bypass valves. As the bypass valves were closed, reactor water level reached the Level 3 scram setpoint (+12.5 inches) and continued to trend downward. RCIC was manually initiated to restore water level. As the turbine bypass valves were going closed, level continued to trend downward until reactor water level reached the Level 2 setpoint (-38") on two (A and B) of the four reactor vessel level channels. As a result of the Level 2 setpoint being reached HPCI automatically actuated and injected water to the reactor coolant system.

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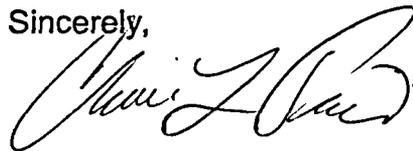
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The HPCI automatic initiation and injection into the reactor vessel was the result of the trip of the reactor feedwater pumps and the transition to the condensate system for reactor feedwater level control.

An assessment of the total accumulated actuation cycles for the HPCI injection nozzles and the nozzle usage factors is currently in progress. The results of this assessment will be reported in a supplement to this Special Report by March 31, 2005.

If you have any questions regarding this submittal, please contact Brian Thomas at (856)339-2022.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Christina Perino', written in black ink.

Christina Perino

Director – Licensing and Nuclear Safety

JAN 07 2005

BJT

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