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PSEG
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AUG 2 3 2012

LR-N12-0249

10 CFR 50.73
NUREG 1022

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-001

Hope Creek Generating Station Unit 1
Facility Operating License Number NPF-57
Docket Number 50-354

Subject: Retraction of Hope Creek Licensee Event Report 2012-002

In accordance with NUREG 1022 Sections 2.8 and 5.1.2, PSEG Nuclear LLC is retracting (formally withdrawing) Licensee Event Report (LER) Number 2012-002.

LER 2012-002 was transmitted to the NRC via letter LR-N12-0149 dated May 14, 2012. The LER reported, under 10CFR50.73 (a) (2) (v) (D), an event or condition that could have prevented the fulfillment of the safety function of an SSC that is needed to mitigate the consequences of an accident.

Subsequent to submittal of LER 2012-002, Hope Creek Engineering performed analyses (discussed in the Attachment) using more accurate input conditions. These analyses have determined that the HPCI system (the system that was the subject of the LER) was able to perform its safety function. Therefore PSEG Nuclear is retracting LER 2012-002.

LER 2012-002 reported that a supplement to the LER was anticipated. This retraction eliminates the need for that supplement.

No regulatory commitments are contained in this correspondence.

Should you have any questions concerning this letter, please contact Mr. F. Paul Bonnett at (856) 339-1923.

Sincerely,

Eric S. Carr
Plant Manager
Hope Creek Generating Station

Attachment: LER 2012-002 Retraction

IE22
NRR

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Attachment
LER 2012-002 Retraction

Background

On March 14, 2012, the high pressure coolant injection (HPCI) system was declared INOPERABLE when the turbine governor control valve failed to respond as operators expected during a planned maintenance evolution. The system was aligned for obtaining an oil sample and the reactor operator (RO) started the auxiliary oil pump (AOP). The control valve moved to mid position, but did not immediately return to the closed position as expected. The RO verified that the flow controller output demand was set to zero with the controller in MANUAL, then attempted to shut the governor control valve by depressing the "lower" pushbutton. The RO observed no change in valve position or indication. When the AOP was secured, the control valve went fully closed.

Subsequent troubleshooting concluded there were no issues with the governor valve relay linkage or electronic controls. Troubleshooting noted that the EG-R internal plunger was able to move by hand, but internal inspection showed evidence of rust. It was decided that the EG-R and remote servo should be replaced and sent to the vendor for analysis and refurbishment. After replacement, the new EG-R was statically and then dynamically tuned. A system functional test was conducted that verified proper control system response with the new EG-R and remote servo.

Discussion

Subsequent to submittal of LER 2012-002, the results of the vendor analysis were received and reviewed. The internals of the EG-R had evidence of rust. During the March 14 oil sampling operation, the EG-R plunger was determined to have moved slowly in order to overcome "stiction" from rust. Due to this initial slow movement of the EG-R plunger, the turbine control valve opened further than normally expected. During oil sampling, the EG-R plunger is in a position that allows oil to be ported to the remote servo to open the turbine control valve. The pilot valve plunger is then able to move to a position to begin closing the turbine control valve. The turbine control valve demonstrated that it was able to travel in both the open and closed directions, as required during system operation. The EG-R pilot valve plunger settled in a position that prevented control oil from moving to or from the remote servo; however, upon removal of the AOP from service, the EG-R plunger moved to a position that allowed closing of the turbine control valve. A subsequent start of the AOP resulted in the normal movement of the turbine control valve, indicating temporary stiction had been cleared.

With an actual system start the control valve would have been in an open position to allow the turbine to roll and the EG-R pilot valve drive shaft to rotate, which is designed to free any binding between the pilot valve plunger and compensating bushing. Also, the oil pressure of the EG-R is raised by an internal gear type oil pump upon turbine roll. This oil pressure is controlled by an internal relief valve to keep operating control oil pressure at 325-375 psi above oil supply pressure. This is 325-375 psi above the oil pressure during sampling. The force to overcome any friction present is much higher during turbine rotation.

The HPCI system was always able to respond as designed during an on-demand system initiation and fulfill its safety function. Therefore no maintenance rule safety system functional failure occurred.