



NRC NEWS

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NRC RELEASES TWO LETTERS REGARDING HOPE CREEK NUCLEAR PLANT; LETTERS DISCUSS PUMP REVIEW AND SPECIAL INSPECTION RESULTS

The Nuclear Regulatory Commission has released two letters regarding the Hope Creek nuclear power plant in advance of a public meeting about the facility scheduled for this Wednesday, Jan. 12. One letter provides the agency's assessment of whether one of Hope Creek's two reactor recirculation pumps can safely operate until the plant's next refueling and maintenance outage. The other letter provides the preliminary results of an NRC special inspection conducted at the Hancocks Bridge (Salem County), N.J., plant following a steam pipe failure and shutdown with complications that occurred there on Oct. 10.

With regard to the NRC's assessment of the plant's "B" recirculation pump, the NRC has conducted a detailed review of its safety. This review included analyses of information provided by PSEG, which operates the plant, meetings with the company to obtain additional data and assessments of the information by the agency's technical experts.

Following this review, the NRC has concluded that operation of the pump for one more operating cycle is acceptable, provided that PSEG implements commitments to closely monitor the pump for vibrations throughout the cycle and to respond promptly to any evidence that its performance may be degrading. (Nuclear plants typically shut down for refueling and maintenance outages about once every 18 to 24 months.) These commitments will be formalized in a Confirmatory Action Letter that the NRC expects to issue to PSEG prior to the plant's restart. The NRC's Resident Inspectors at the site also will ensure that PSEG complies with this new commitment.

"After a careful and thorough review, including analysis by the NRC's Office of Nuclear Reactor Regulation, the NRC concludes that the Hope Creek nuclear plant can operate safely without replacing the pump until its next refueling and maintenance outage," NRC Region I Administrator Samuel J. Collins said. "That conclusion, however, is contingent on requirements agreed to by the company that rigorous and continuous monitoring be maintained of pump parameters, including vibration levels, so that prompt actions can be taken should there be abnormal indications."

Following the Oct. 10th event at the plant, an NRC team of five full-time and four part-time members was tasked with evaluating the circumstances surrounding it. The review included, among

other things, an assessment of whether the failure of the 8-inch-diameter pipe could have been prevented and an independent evaluation of equipment and human performance issues that complicated the shutdown of the reactor.

Based on the preliminary results of that inspection, the team has determined that Hope Creek operators successfully responded to the event and that PSEG conducted comprehensive follow-up evaluations and developed appropriate corrective actions. The NRC team also has confirmed PSEG's determination that the root cause of the event was that plant personnel did not properly evaluate and address a degraded level control valve for the moisture separator drain tank. That valve malfunctioned several weeks prior to the event when it opened and then failed to close. As a result, a drain line for the tank received a combination of water and steam even though it is primarily intended for the removal of water. The ensuing turbulent flow placed stresses on the pipe that eventually led to its failure and caused the plant's Oct. 10th shutdown.

The NRC is continuing to review the significance of this finding and will issue a preliminary determination in the full inspection report to be issued within 45 days after the Jan. 12th meeting. However, the team believes the finding could be of low to moderate safety significance. If validated through the agency's review process, the finding would eventually be finalized as a "white" issue and lead to some additional NRC oversight. (The NRC's Reactor Oversight Process classifies inspection findings by color, ranging from "green," for a very low safety issue, to "red," for a high safety issue.)

In addition, the team has identified three other inspection findings associated with some equipment issues that challenged plant operators during the shutdown. The team has deemed those issues to be of very low safety significance because none of the problems would have prevented the systems involved from performing their intended safety functions.

Copies of both reports will be posted on the NRC's web site at:

<http://www.nrc.gov/reactors/plant-specific-items/hope-creek-salem-issues.html> .

As previously announced, the Jan. 12th meeting, which will be open to the public for observation, is scheduled to begin at 7 p.m. at the Holiday Inn Select Bridgeport, located off Exit 10 of Interstate 295 in Swedesboro, N.J. Before the session is adjourned, NRC staff will accept questions and comments from the public.

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