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Hope Creek plant staying closed:

Description

This article from The News Journal describes difficulties faced by Hope Creek Nuclear power plant after concerns were raised by Dr. Kymn Harvin.

Abstract

Del. senators raise concerns over Oct. 10 leak, 'deficiencies' at N.J. facility

JEFF MONTGOMERY / The News Journal

PSEG Nuclear officials said Monday that they will move up a scheduled refueling for the Hope Creek nuclear plant near Salem, N.J., opposite Augustine Beach, extending a shutdown that began last week after a major steam leak. Nuclear Regulatory Commission investigators continue to study events surrounding the steam-line break and its aftermath. No one was injured, and radiation levels inside the turbine building where the 8-inch line sheared never reached more than 2 percent of federal safety limits, NRC officials said.

"Hope Creek Station will not be restarted until we fully understand the equipment and performance issues that resulted in the Oct. 10, 2004 steam leak and that we have taken the necessary corrective actions," PSEG Power President Frank Cassidy

said in a statement issued Monday.

About 20,000 Delaware residents live within 10 miles of the reactor complex, and 17 schools are inside the 10-mile radius, according to Delaware's senators, who recently wrote to the NRC expressing concern about the events at Hope Creek.

Plant operators encountered multiple problems Oct. 10 at the 1,100 megawatt reactor, which can produce enough electricity to meet the energy needs of 400,000 to 1 million homes. The plant and its neighboring Salem Units 1 and 2 had been under heightened federal scrutiny for months because of concerns over safety issues and maintenance backlogs.

During the shutdown, workers struggled to manage fluctuating reactor pressure and water levels, and also faced problems with a high-pressure coolant injection system that serves as an important safeguard.

"We understand basically how the event progressed. There are some details that aren't 100 percent clear," said Gene Cobey, branch chief for the NRC office that inspects reactors in the region that includes New Jersey. "It really has to do with why the operators took the specific actions they took to control the level, and the manner in which they did it."

Cobey confirmed that the company and regulators are evaluating vibration and maintenance problems in one of the main pumps used to recirculate water through the Hope Creek reactor core, describing the issue as a "potential concern."

"We hope they'll stay offline long enough to fix all their problems," said Norm Cohen, who directs the Unplug Salem Campaign, a New Jersey group concerned with nuclear plant safety.

PSEG chief nuclear officer Chris Bakken told NRC officials in a letter Sunday that a preliminary investigation "revealed equipment and personnel performance issues" that contributed to the accident. Bakken said the company's response may include changing how workers are trained to manage pressure and water levels in the Hope Creek reactor core.

In a statement released by workers Monday, Bakken said the decision to keep the reactor idle and begin refueling sooner than planned was the "best course of action."

History of problems

Delaware Democratic Sens. Joe Biden and Tom Carper jointly wrote the NRC last week to express concern about the Oct. 10 incident. They reminded regulators that problems at Salem and Hope Creek in the past led to a study by the General Accounting Office, now called the Government Accountability Office, that found weaknesses in the NRC's performance as federal overseer of nuclear plants.

The earlier problems, which led to a lengthy shutdown of both Salem units, "could potentially have led to catastrophic results," the lawmakers wrote, and were tied to management weaknesses and worker concern over retaliation.

"We are concerned that Salem and Hope Creek are once again experiencing management and safety culture deficiencies, similar in part to conditions experienced in the 1980s and the 1990s," Delaware's senators said.

Elizabeth Wenk, spokeswoman for Rep. Mike Castle, R-Delaware, said Castle is monitoring the issue closely. Wenk said PSEG may hold a briefing Thursday to update congressional staff members.

Nancy Kymn Harvin, a former PSEG Nuclear senior manager who said she was fired from the company last year for raising safety concerns, accused the utility of putting "profits before safety."

"We have lots of warning signs, just like we had with NASA, just like we had with the terrorists," Harvin said. "It's incumbent on us to take the lessons learned from those catastrophes and apply them in this situation, instead of waiting for the worst-case scenario."

Harvin said that Hope Creek employees contacted her about the accident and continuing safety concerns, prompting her to urge the NRC to prevent a restart before the investigation is complete.

Safety, training issues

Nuclear critics and a national watchdog group cited the incident as further justification for a shutdown of both Hope Creek and the twin Salem units along the river in Lower Alloways Creek Township.

NRC officials recently placed the complex in a special oversight status, and had been asking the company for months to resolve maintenance backlogs and workplace environment issues that the agency said discouraged employees from coming forward with their concerns about safety.

"The material condition of the plant shifted a lot of the burden onto the shoulders of the operators to cope with equipment that wasn't working right," said David Lochbaum, a nuclear safety engineer for the Union of Concerned Scientists, a nonprofit environmental group.

Lochbaum said his group has questioned an apparent delay of more than 40 minutes in some responses to the original steam leak.

He also said operators exceeded federal limits on the use of some emergency equipment that draws Delaware River water to indirectly cool a pool that was used to help remove heat from the reactor core.

Company and NRC officials have insisted that the plant's high-pressure coolant injector always was available for use and that plant operators chose other methods to manage pressure and fluctuating water levels inside the core.

NRC officials confirmed, however, that a pump associated with the system had malfunctioned during the mishap and that workers risked contaminating a room at the plant had they activated the system.

Lochbaum said workers would have run a risk that the injector system would "tear itself to pieces" had they put it to normal use.

"Rather than keep challenging something that was impaired, they went to a system that was working with less baggage," Lochbaum said. "They weren't able to use systems that were first on the list, procedurally."

The Hope Creek/Salem complex ranks as the nation's second-largest nuclear generating station.

Company officials estimated that the rescheduled refueling, originally set to begin Oct. 28, will cost the company \$12 million to buy power elsewhere and cover additional operation and maintenance expenses. The extra spending will trim earnings per share by about 5 cents, or 1.5 percent to 1.6 percent, officials said.

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