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Indian Point Faces Scrutiny After Some Crews Fail Tests

By MATTHEW L. WALD

ASHINGTON, Dec. 7 — The Nuclear Regulatory Commission said today that it would immediately increase scrutiny of the Indian Point 2 nuclear reactor because four control room crews had failed to pass their annual requalification tests, signaling substantial safety concerns.
The crews failed to react properly in four accident drills over the last three months. Two of the drills called for procedures that were also needed in recent accidents at the plant, in Buchanan, N.Y., the N.R.C. said.

The tests were administered by the plant owner, Entergy Nuclear, in a control room simulator. But today, the N.R.C. took the unusual step of sending its testers to examine one of the crews itself.

N.R.C. specialists will conduct random surveillance in the plant's control room, said a spokesman for the agency, Neil A. Sheehan, and the agency may increase its involvement in other ways.

Entergy Nuclear said that two of the crews failed because the company had made the exam tougher.

The tests suggest that nuclear plants are not as safe as utilities think they are, said a nuclear engineer familiar with the results. But he added that the lapses were not serious enough to cause a meltdown.

The engineer, David Lochbaum, works for the Union of Concerned Scientists, a group that often criticizes nuclear plants as unsafe.

"The risk assessments that are done assume that the operators are going to be right 90-something percent of the time, and that they don't make mistakes," Mr. Lochbaum said.

Entergy bought the plant on Sept. 6 from Consolidated Edison. Jim Steets, a spokesman for the plant, said some management changes had been made in response to the training problems.

In a letter to Entergy dated Wednesday, the commission said, "The deficiencies identified during the exams reflected the potential inability of the crew to take appropriate safety-related actions in response to actual abnormal or emergency conditions."

Indian Point 2 has five operating crews, who run the control room in rotating shifts, and two "staff crews," operators who fill in for vacationing or sick employees, Mr. Steets said. In all, 44 operators were tested. The workers who failed the tests, working in teams of five to seven, have since had remedial training, the N.R.C. said. Ten failed as individual operators in addition to their team failures, the agency said.

The tests are given in the simulator, a control room with the same screens, switches and gauges as the real one, but connected to a computer instead of a reactor.

In one simulated emergency, an equipment failure should have triggered an automatic start of the emergency core cooling system, but it did not do so. The crew failed to manually start the system promptly, the N.R.C. said.

In a second simulated emergency, the emergency core cooling system started in response to a major pipe leak. At first, the system draws water from a refueling water storage tank, but before that supply is exhausted, operators are supposed to set up the system to draw from the leaking water collecting in the basement of the reactor building. The crew did not do so, the commission found.

In another scenario, some control room instruments lost power. The crew did not restore power fast enough, the N.R.C. said, referring to the incident as a "competency failure." A similar situation occurred at Indian Point 2 in August 1999, when the power supply to some instruments was lost but a battery picked up the load. The operators failed to correct the problem before the battery ran down, hours later.

The last scenario involved controlling the pressure in a steam generator, which can be a critical task after a leak in the generator. The plant had such a leak in February 2000 and it kept it shut for a year.

In the drill, the crew members being tested took 25 minutes to realize that a valve they thought was open was actually closed.

Mr. Lochbaum described the errors as "more steps down the Three Mile Island pathway." That accident, in March 1979, began with a common mechanical failure but was aggravated by controller error, in part because of inadequate training.