Federal officials are investigating an allegation that the electrical wiring for the critical safety and operating systems at the Indian Point 2 nuclear power plant violate federal regulations and could be inoperable following an accident or assault.

Three Nuclear Regulatory Commission electrical system experts held a closed-door review last night in the Tuxedo Town Hall in Orange County with a former Indian Point manager to review hundreds of pages of internal documents concerning the condition of the plant's wiring.

The team was led by Peter Habighorst, the NRC's senior resident inspector at Indian Point, and included two experts from the agency's regional headquarters in King of Prussia, Pa. The documents were provided by William Lemanski, a Tuxedo town councilman who was manager of software for Entergy Nuclear Northeast, which owns the Buchanan nuclear plants, until he retired last November.

Lemanski, in a formal complaint filed Feb. 20 with the NRC, contends that the improper wiring began in the mid-1990s when the plant was owned and operated by Consolidated Edison, but "Entergy has been continually concealing these problems."

NRC spokesman Neil Sheehan said yesterday that a special NRC panel of a dozen or more experts will review the trio's findings.

"There is no set size for a panel like this," Sheehan said. "We want to have many different perspectives and people with different types of backgrounds. It could lead to an opening of a formal investigation by the Office of Investigations."

A finding of similar wiring problems at the Maine Yankee nuclear power plant in Wiscasset in 1996 led to the permanent shutdown of the plant the following year.

Entergy, in a written statement, yesterday said that all the plant's electrical systems "meet safety requirements," and outside experts hired by the company found that wiring violations detected by the plant's computerized monitoring system "are
attributable to the software, rather than actual conditions in the plant."

The statement said Entergy "welcomes a review by the NRC, which we believe will confirm our review findings."

David Lochbaum, nuclear safety systems expert at the Union of Concerned Scientists, said the issue raised by Lemanski involves "cable separation," which is covered by one of the NRC's most stringent licensing regulations. The rule requires each system to have duplicate wiring and equipment in different locations so that a single accident cannot wipe out multiple safety and operating systems.

Lochbaum, a former consultant at Indian Point 3, said a March 1975 fire in a single room at the Browns Ferry nuclear power plant in Alabama "disabled the entire array of emergency core cooling systems. The primary, the backup, and backup to the backup systems were all lost."

As a result of this accident, said Lochbaum, the NRC requires plant owners to walk inspectors through each room and "show that even if all of the equipment inside that room is destroyed, sufficient equipment outside that room survives to allow the reactor to be shut down and adequately cooled."

Lemanski, 57, worked for the New York Power Authority at Indian Point 3 for 20 years, and joined Entergy when the plant was sold in 2001. He was responsible for the computer system that monitored the thousands of miles of electrical cables and ensured that the wiring was up to standard. This was particularly important, he said in an interview, because modifications are frequently made to electrical systems and equipment, and these changes must comply with the NRC's regulations.

But in the mid-1990s, he wrote in his NRC complaint, Indian Point 2 engineers began disregarding regulations, and "were undermining the cable separation and potentially rendering engineered safety systems non-functional."

These violations were discovered, he said, when Indian Point 2 was purchased from Con Edison later in 2001 by Entergy. The computer monitoring system Lemanski managed "produced 329 pages" of data showing faulty wiring, and he said he reported the discrepancies several times to management.

"I raised this issue to Entergy from the lowest level to the highest in the engineering department in the last two years," he said, "and they continually ignored it, delayed it and, to some extent, concealed it. And the corrective action program in place to preclude this from happening didn't work."

Lemanski said yesterday that following the formal internal complaint last September, Entergy's senior electrical managers and members of two outside consulting firms met with him to review his records. He said they agreed on the seriousness and extent of the problem, "and within a week or two one of the managers put together an action plan that was pretty comprehensive."

When he retired, he said, he thought the problem would be corrected. But he said he learned in January from former colleagues "that Entergy is now trying to alter the logic in the computer program to minimize the errors that surfaced. This is just a new chapter in an old shell game, and that's why I contacted the NRC."
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