http://toledoblade.com/apps/pbcs.dll/article?AID=/20100318/NEWS16/3180359

The Toledo Blade

March 18, 2010

Feds send special team to inspect Davis-Besse

By <u>TOM HENRY</u>

BLADE STAFF WRITER

OAK HARBOR, Ohio - With more questions arising out of the latest situation at Davis-Besse, federal regulators announced late yesterday they have dispatched a special inspection team to the Ottawa County nuclear plant.

Viktoria Mitlyng, U.S. Nuclear Regulatory Commission spokesman, said three inspectors with highly specialized skills will join the plant's two permanent resident inspectors to beef up the agency's onsite review. An untold number of NRC employees at the agency's headquarters in suburban Washington and at its regional office southwest of Chicago will provide additional assistance, she said.

Ms. Mitlyng said the NRC is taking an especially hard look because of Davis-Besse's past, which includes the near-rupture of the plant's old reactor head in 2002.

Ottawa County Administrator Jere Witt, a member of the FirstEnergy nuclear review board, said yesterday the latest setback "certainly was not expected."

"The positive is they discovered it right away and are going to take care of it," Mr. Witt said.

A common denominator between the 2002 event and the latest episode at the plant is the presence of cracked control-rod drive-mechanism nozzles.

Those are long metal tubes jutting out of the reactor head that are used to help guide control rods in and out of the reactor core. The cracks have allowed acid to leak out of the reactor core, although the NRC says the amount found last weekend is a fraction of what was discovered in 2002.

The first round of ultrasonic tests on the reactor head's 69 nozzles of that type was completed yesterday.

Fourteen of them, one more than previously known, were found to have degraded to the point of having suspicious flaws or cracks. More tests are being done to determine what type of imperfections or cracks exists, Todd Schneider, FirstEnergy spokesman, said.

He said the utility looks forward to working with the NRC's inspection team.

"It really doesn't change anything because the NRC has been monitoring our actions all along," Mr. Schneider said.

Control rods are used to shut down and restart nuclear plants. The nozzles that serve as passageways for their drive mechanisms also are important safeguards because they keep air from making contact with coolant water inside the reactor and forming radioactive steam.

NRC records show Davis-Besse's reactor, one of the nation's hottest, operates at about 600 degrees.

"The people who are there have in-depth knowledge of what's happened there and at other plants," Ms. Mitlyng said.
"They're going to stay as long as they have to be there."

Meanwhile, a Washington watchdog group has raised questions with the NRC's headquarters about the capability of a leak-detection system unique to Davis-Besse.

Called Flus (pronounced floose), the French product was touted by FirstEnergy executives as a first line of defense when the utility was negotiating Davis-Besse's restart during the plant's record two-year outage. The NRC allowed Davis-Besse to resume operation in 2004, in part because FirstEnergy made the case that it was going above and beyond minimum requirements by installing the monitor.

Paul Gunter of Beyond Nuclear asked Michael Mahoney, the NRC's project manager for Davis-Besse, to investigate why Davis-Besse wasn't shut down manually at the first sign of leakage.

He questioned whether the device wasn't working, was misread, or was overlooked by plant operators.

- Mr. Gunter also questioned why the device was placed on the bottom of the reactor head.
- Mr. Mahoney told The Blade the NRC intends to find out.
- Mr. Schneider said the device never went off because there was no leakage from the bottom.

FirstEnergy placed the Flus monitor on the bottom because of leakage found in that part of a South Texas reactor vessel in 2003. At the time, it was unknown whether Davis-Besse had similar leakage - especially because stains were present. No leakage was found near the bottom of the Davis-Besse vessel back then. The stains were attributed to chemicals dispersed by post-shutdown power washing.

The Flus device was installed only to detect a leakage from the bottom. The utility is more selective about inspecting the bottom because of the cost of removing insulation. It also needs to minimize worker exposure to radiation, Mr. Schneider said.

"The Flus is only designed to monitor the bottom," he said.

The device also would have trouble working if it were on the top of the reactor head because fans disperse air in containment to help keep cool down the control rod drive mechanism nozzles, Mr. Schneider said.

Contact Tom Henry at: thenry@theblade.com or 419-724-6079.