Spill an 'unusual event' or business as usual?

By KIM SMITH ksmith@scn1.com

BRACEVILLE -- Exelon officials say tritium was released because of an "unusual event."

Tritium was released 100 feet into the air around 9 p.m. Thursday, Exelon said, as part of normal nuclear power plant operations -- or at least it's normal when there is a power outage.

The outage was termed an "unusual event," the lowest of four emergency classifications defined by the Nuclear Regulatory Commission.

"We are still looking into the cause of the outage," said Paul Dempsey, spokesman for the Braidwood facility.

The steam released into the air from Braidwood Generating Station in Braceville, contained 11,500 to 38,000 picocuries of tritium per liter of water.

Tritium is a radioactive hydrogen isotope that is a byproduct created when nuclear reactors produce electricity. Exposure reportedly can increase the risk of cancer, birth defects and genetic damage.

Neighbors described the sound as similar to a 747 taking off and lasted for more than an hour, they said.

"We appreciate the patience of our neighbors during the initial outage in which plant noises may have been loud and startling," said Bryan Hanson, vice president of the Braidwood station. "It is also important people realize that this kind of steam venting is part of the plant design and poses no environmental health or safety issues to workers or to the public."

The release is allowed under the station's operating license, which is regulated by the Nuclear Regulatory Commission.

Dempsey also said the release was on both sides of the Unit 2 containment building in the middle of their property. He said it is important for people to know that this steam release has nothing to do with leaking of tritium into the groundwater.

Established level unsafe?

The U.S. Environmental Protection Agency has deemed the safe limit of tritium in drinking water to be 20,000 picocuries per liter. The station's estimate of the amount of tritium released falls below the safe limits at the low end and nearly twice the safe limit at the high end.

Some don't think that EPA's established level is safe.

Last year, during a Citizen Information Network meeting in Godley, Arjun Makhijana of the Institute for Energy and Environmental Research, said no level of radiation is safe. He believes any radiation absorbed into a woman's reproductive system can pose risks to her future children.

Required to report leaks

Tritium leaks from nuclear plants aren't new in this area.

For many years, companies spilling tritium weren't required to report it. It is believed up to 6 million gallons of tritium-laced water have spilled out of the Braidwood station for more than a decade.

Now, laws have changed and Exelon is required to report leaks or releases of possible contaminants.

The previous spills came to light in December, 2005, when the Illinois Environmental Protection Agency issued a notice of violation for releasing tritium exceeding groundwater standards at the Braidwood plant. A second letter was sent Feb. 28, 2006, about a different spill at the plant.

Numerous water problems were experienced in neighboring Godley after those spills. Well tests found low levels of tritium but high amounts of nitrates and coliform bacteria.
Exelon set $11.5 million aside to build a new water system in Godley. In the meantime, the power giant has picked up the tab for bottled water for those living in the area.

Joe Cosgrove, manager of the Godley Public Water District, said the new system should be in place sometime next winter. There have been some setbacks due to easement issues but the placement of the new water lines is about 80 percent complete.

He expects to have bids approved on the plans to build a new water tower in several weeks.

June leak confined to Dresden

By KIM SMITH ksmith@scrn1.com

MORRIS -- In June, a pipe leaked tritiated water at the Dresden Generating Station.

Exelon officials reported the leak to state and federal authorities after tritiated water was found in one monitoring well, in nearby storm drains and in a concrete vault.

The monitoring well sample found levels of 3.2 million picocuries -- about 160 times the EPA's safe level for drinking water. That is the same level of tritium found in the tanks and associated pipes, Exelon officials say.

Tritium is a naturally occurring isotope of hydrogen that emits a very low level of radiation and is a natural part of water. But it's found in more concentrated levels in water used in nuclear reactors. Exposure to high levels of tritium increases the risk of developing cancer.

Workers found the local area of tritiated water through the plant's environmental monitoring program, which includes routine water sampling from 71 areas designed to detect unusual levels of tritium.

Engineers discovered the pipe leaking the tritiated water using ultrasonic pipe testing equipment. The 24-inch aluminum pipe carries tritiated water between storage tanks and plant systems.

While engineers repaired the leaking pipe, the station pumped water from the excavation site through the plant's waste-processing system.

There is no indication the tritiated water left the station property, said Dresden Station site Vice President Tim Hanley in a written statement.

"At no time has there been a threat to public or employee health and safety," Hanley wrote.

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