Rate of Cancer Deaths Near Nuclear Reactors to Be Focus of Federal Study
Saturday, August 22, 2009 1:53 PM


Aug. 22--The rate of cancer deaths near nuclear reactors will be the subject of a major national study to be conducted by federal regulators.

In 1990, a National Cancer Institute report on the subject found cancer mortality rates were "generally not elevated for people living in the 107 U.S. counties containing or closely adjacent to 62 nuclear facilities," according to information provided by the Nuclear Regulatory Commission's Office of Regulatory Research.

Since data used in that study relies on records from 1950 to 1984, the NRC decided last year it was time to revisit the controversial issue, with an eye to its impact on human health, said Scott Burnell, a spokesman for the NRC.

"It hasn't been a formal request, but the topic comes up often enough (at public meetings) that the staff said, 'Yes, it's about time we come up with an up-to-date work product we can refer people to.' When 20 years have passed and research methods and tools have evolved over time, it's reasonable to see if there's a more refined research project that can be put together."

Still in the early stages, the new study began last October and is scheduled to result in a final report two years from now. The primary focus would be to look at cancer mortality in the counties that have nuclear reactors, Burrell said. Using new scientific tools to narrow the scope from counties to smaller geographical units like towns or ZIP codes is also a possibility as the study evolves, he said.

What the study would not address, but could become a topic for future scrutiny, depending on the findings, would be whether any specific effluent or radiation dose from particular operating and closed plants causes cancer, he said.

However, this study could lead to another one on the incidence of cancer around nuclear power plants, which would likely cover people diagnosed with the disease, Burrell said.

The nuclear industry measures and monitors radiation releases to make sure they are below what have historically been considered safe thresholds, but the subject continues to attract the critical attention of nuclear watchdogs such as Beyond Nuclear and the Connecticut Coalition Against Millstone.

Millstone Power Station in Waterford is home to two operating reactors and one that is shut down. The Connecticut Yankee reactor in Haddam Neck has been shut down, also. Dominion regularly updates its Web site with data on atmospheric radioactive releases, a requirement added in state law last year.
Watchdog Paul Gunter, Beyond Nuclear's director of reactor oversight, cited conflicting results from other studies done as far away as Germany and as close as Massachusetts.

But Steve Kerekes, a spokesman with the Nuclear Energy Institute, an industry trade group, said the industry and its regulators monitor the effects of radiation exposure and take steps to ensure public and worker safety.

"We understand the public's concern about the area and that's why we operate the plants as stringently as we do," Kerekes said.

Americans receive small doses each year of 0.3 rem from natural background radiation, including radon in the air, cosmic rays and the Earth itself, the NRC states on its Web site. The threshold the agency deems "reasonably achievable" is a dose from nuclear reactors that is under 0.1 rem a year for the public and under 5 rems a year for people exposed to radiation in the workplace.

"A yearly dose of 0.36 rem from all radiation sources has not been shown to cause humans any harm," the NRC Web site states.

So far, Oakridge Associated Universities of Oakridge, Tenn., an epidemiological study group, has been hired to formulate a draft protocol for the study, which an outside peer review committee would review before the study proceeds, Burnell said. The OAU's contract is for close to $1 million, he said.

As of Friday, several scientists had been hired to participate on that panel, which will have about 10 members, Burnell said. Some of the participants are from NCI, the Centers for Disease Control, the U.S. Department of Energy, and the French Institut de Radioprotection et de Surete Nucleaire, he said. He declined to identify the scientists selected.

The panel is "an independent group that will be free to make whatever recommendations they feel are necessary to improve the project," Burnell said. "The NRC will reimburse these experts for their time regardless of what they say about the project."

Nancy Burton, director of the Connecticut Coalition Against Millstone, said in an e-mail that for the study to have legitimacy it must bring in Drs. Helen Caldicott; Ernest J. Sternglass, a health physicist; and Arjun Makijani, who reported in 2006 on the vulnerabilities of women and children to low-level ionizing radiation.

Caldicott helped found the Physicians for Social Responsibility, a group of 23,000 doctors committed to educating colleagues about the dangers of nuclear power, according to her Web site.