



Plans change for ORNL nuclear material

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OAK RIDGE - The government has scrapped its plan to extract medical isotopes from a stockpile of uranium-233 at Oak Ridge National Laboratory.

Instead, the Oak Ridge project will focus on eliminating the nuclear material's weapons capability - by blending it with other, non-fissile uranium products - and disposing of it as quickly and safely as possible.

The change of direction was ordered by Congress as part of a conference report on the 2006 Energy and Water appropriations bill, which provided \$18 million for the project this year. The U.S. Department of Energy's Oak Ridge office is responsible for carrying out those orders.

DOE currently is preparing a report to Congress, and the federal agency offered few details in response to questions.

"The department is evaluating how best to disposition this material," DOE spokesman Walter Perry said. "At this time, no contract decisions have been made."

In 2003, DOE awarded a contract to Isotek Systems Inc. that set in motion a nine-year, \$128 million project that was supposed to get rid of the uranium stockpile while providing a valuable supply of medical isotopes. The plan was to extract the radioactive "daughters" of the enriched uranium-233 and ultimately use a byproduct isotope - bismuth-213 - for research and trial treatments for cancer.

"DOE has an important responsibility to clean up the legacies from the Cold War," then-Energy Secretary Spencer Abraham said at the time. "That we can fulfill this mission while producing valuable new tools in the fight against cancer is an exciting and unique opportunity."

For decades, ORNL has stored more than 1,000 containers of U-233 in Building 3019, a World War II-era facility that requires millions of dollars annually for security and maintenance.

UT-Battelle, the government's managing contractor at ORNL, is anxious to get the nuclear material out of 3019.

"It has no strategic or scientific value to us," Jeff Smith, the lab's deputy director for operations, said. "We're interested in removing it so we no longer have to entertain it as a security risk."

Security is a big issue at Building 3019, with increasing concerns about terrorism and the possible use of the U-233 in nuclear weapons.

Although Oak Ridge contractors have insisted that the nuclear material is safe and secure, the presence of such a large stockpile of weapons-usable material at a relatively open research lab has raised concerns from the Defense Nuclear Facilities Safety Board and others.

The Project On Government Oversight last year suggested the ORNL building was vulnerable to terrorists, and members of the watchdog group claimed they were able to breach the lab's security during an Oak Ridge visit.

Peter Stockton, a senior investigator with POGO, said the negative attention might have played a role in the decision to alter the plans for processing the U-233.

As part of the congressional directive, DOE also was told to provide a report showing how Building 3019 will comply with new anti-terrorism requirements. Those requirements are outlined in the "Design Basis Threat," the government's intelligence-based planning document.

Eliminating medical isotopes as part of the Oak Ridge project is a good move, Stockton said. It should speed up the project and get the U-233 out of Building 3019 ahead of the previous schedule, which called for completion in 2012, he said.

However, Pat Hopper, the president of Isotek Systems, said he didn't think eliminating the medical isotopes work would change the schedule that much.

"You still have to do the down-blending (to get rid of the bomb potential), and that's the bulk of the processing," he said.

Hopper said the schedule probably could be shortened but added, "You're not talking about a huge difference in what we previously planned to do."

He said Isotek is waiting for formal direction from DOE on what to do. He said he expected the existing contract to stay in effect, perhaps with some modifications.

Some part of the DOE report to Congress will be classified, and Isotek may not be privy to all of that, Hopper said.

Responsibility for the Oak Ridge project has been moved from DOE's Office of Nuclear Energy to the environmental cleanup program.

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