

Hanford's Fast Flux Test Facility Has Gone Quiet

FFTF SHUTDOWN WORK COMPLETED

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Work was completed this week to shut down the research reactor, which FFTF supporters say is the Department of Energy's largest and most modern reactor.

The 110 FFTF workers, many of whom had worked there since it began operating in 1982, gradually were dispersed to other Hanford projects over the last year as projects required to shut down the reactor have been completed.

The research reactor has not operated since 1992, but work has been under way to deactivate it to a state that will require the minimum of surveillance and maintenance short of tearing it down.

That will allow money being spent at FFTF to be used for more pressing environmental cleanup work at Hanford, said Bob Wilkinson of CH2M HILL Plateau Remediation Co. He compared the completed work at FFTF to draining the oil from a car and putting it up on blocks.

The decision on whether to dismantle the 400-megawatt reactor still must be made.

An environmental study that is required if DOE decides to tear down the reactor could be completed this month. DOE's options for the reactor will be considered, along with other issues, in the Tank Closure and Waste Management Environmental Impact Statement.

The reactor had been maintained on standby to allow it to be restarted efficiently until both Democratic and Republican administrations concluded that it had no financially viable use. Options ranging from production of isotopes for medicine to production of tritium for weapons have been considered over the last decade.

The budget for the reactor, which was about \$36 million annually when it was on standby, would drop to a proposed \$7.6 million for next year. Periodic checks of the reactor still must be done, with some systems inspected every few months and others less frequently.

Work began under Fluor Hanford to drain liquid sodium from the reactor in 2003. Sodium was used to cool the reactor when it produced a variety of medical and industrial isotopes and provided research and testing of components and systems for advanced nuclear power systems.

The last of the fuel remaining at the reactor was shipped to Idaho National Laboratory for processing a year ago. Since then work has been under way, most recently by new contractor CH2M HILL Plateau Remediation Co., to continue to deactivate equipment and remove hazardous and other materials from the reactor.

That included removing 114,000 gallons of antifreeze from piping and emptying PCBs from transformers, said Bo Wier, CH2M HILL's FFTF manager, who now is moving on to manage other CH2M HILL projects. Refrigerants, oils and some residual sodium that had puddled in low areas of the piping system also were removed.

Workers collected 60 tons of paper from the FFTF complex to recycle. That was in addition to 400 to 500 boxes of papers that were saved as technically or historically valuable.

CH2M HILL also has reduced the pressure for the argon system after argon was added to pipes that once held sodium.

Power has been shut off to parts of the complex, including 14 support buildings. However, necessary systems remain, such as a fire detection system. Sodium also continues to be stored there until it can be used at the vitrification plant once it begins treating radioactive waste left from weapons production at Hanford. DOE had a legal deadline under the Tri-Party Agreement to submit a plan for managing FFTF in a minimum surveillance and maintenance mode in June 2010, but CH2M HILL finished the plan and submitted it last month.

The work to shut down the reactor was done safely and way ahead of schedule, Wilkinson said.