

Weapons Complex Morning Briefing

Leaked NNSA Report Sheds Light on Cost Estimate for MFFF Alternative

By ExchangeMonitor

A leaked report from a nominally independent office within the National Nuclear Security Administration offers a trove of new details about the cost estimate for a plan the agency must sell to Congress in order to start producing nuclear-warhead cores in South Carolina.

On [Thursday](#), Energy Secretary Rick Perry said he would officially cancel the Mixed Oxide Fuel Fabrication Facility (MFFF) — intended to dewater 34 metric tons of surplus weapon-usable plutonium — and convert the unfinished building into a factory capable of annually making 50 fissile warhead cores called plutonium pits by 2030.

Perry cited authority given to him by Congress to cancel the facility if he could prove an alternative, called dilute and dispose, could dewater the plutonium for half the cost of finishing the MFFF. Perry said dilute and dispose would cost about \$20 billion while MFFF would cost about \$50 billion.

Now, a 37-page report from the NNSA's Cost Estimation and Program Evaluation office, [obtained by the Union of Concerned Scientists and posted online Monday](#), fills in some of the details.

In inflation-adjusted terms, dilute and dispose would cost about \$20 billion from 2019 through 2050, the CEPE office estimated in the study. That averages about \$645 million per year.

Nearly \$8 billion would be spent at the Los Alamos National Laboratory in New Mexico, which would process plutonium pits into plutonium oxide ahead of further downblending at the Savannah River Site's K-Area. Savannah River would take the next biggest share of dilute and dispose costs at around \$6 billion, according to the internal NNSA report. The Waste Isolation Pilot Plant (WIPP), which would receive the processed plutonium, bears the third-largest share of the costs at about \$1.2 billion inflation-adjusted dollars, the report says.

Transportation costs to WIPP from the Savannah River Site — an expense Rep. Mike Simpson (R-Idaho) has demanded the NNSA tally before it even thought of canceling the MFFF — would ring in at about \$650 million over the life of the project. That includes both transportation and the criticality control overpack containers “and other containers” that would hold the material during the ride, according to the report.

Simpson and his colleagues on the House Appropriations Committee have their first opportunity to reject or accept the NNSA's estimates [today](#) during a markup of the agency's 2019 budget bill. The legislation, approved for a vote last week days before the agency announced its pit decision, funds MFFF and zeroes out the NNSA's request for dilute and dispose.

House NNSA Budget Would Fund Low-Yield Warhead, But Not Pit Production in S.C.

The National Nuclear Security Administration (NNSA) would get the \$65 million it seeks in fiscal 2019 for a low-yield nuclear warhead, but nothing for a new warhead-core factory in South Carolina, under a budget bill approved [Wednesday](#) by the House Appropriations Committee.

Overall, the NNSA would receive more than \$15 billion for 2019: 4.5 percent more than in 2018 and 1.5 percent more than the White House sought for the fiscal year that begins Oct. 1.

The bill passed the committee 29-20 along party lines and was not scheduled for a vote on the House floor at deadline [Wednesday](#) for *Weapons Complex Morning Briefing*.

The bill would provide \$65 million for the NNSA to modify some existing W76 submarine-launched ballistic missile warheads beginning in 2019. Rep Barbara Lee (D-Calif.) offered and withdrew an amendment that would have defunded the low-yield warhead and spent the \$65 million on NNSA nonproliferation programs in 2019.

The NNSA requested funding for the low-yield warhead last month as part of a series of modifications to the federal budget request it delivered to Capitol Hill in March. As a result, the House Appropriations energy and water development subcommittee, which writes the the agency's budget bill every year, never held a hearing about the weapon.

Meanwhile, the House NNSA budget as written would not fund the two-pronged pit-production strategy the agency announced last week, under which operations would be split between the Los Alamos National Laboratory in New Mexico and the Savannah River Site in South Carolina.

The strategy involves converting the unfinished Mixed Oxide Fuel Fabrication Facility (MFFF) at Savannah River into a factory capable of producing 50 of these fissile nuclear-warhead cores a year by 2030. Los Alamos would supply another 30 pits annually.

The NNSA budget approved [Wednesday](#) provides no funding for dilute-and-dispose, DOE's proposed replacement to the MFFF for elimination of 34 metric tons of nuclear weapon-usable plutonium, and includes \$335 million for continued construction of the plant. Dilute-and-dispose involves chemically weakening the 34 metric tons of plutonium at proposed Savannah River Site facilities, mixing the material with concrete-like grout, then burying the resulting mixture at the Department of Energy's Waste Isolation Pilot Plant near Carlsbad, N.M.

On [Wednesday](#), after House appropriators approved funding MFFF for another year, the local *Aiken Standard* newspaper reported the NNSA had frozen hiring and procurement at MFFF prime contractor CB&I AREVA MOX Services. The freeze went into effect [Monday](#) and could last up to 90 days, the newspaper reported.

The Senate Appropriations energy and water development subcommittee is set to mark up its version of the NNSA's 2019 budget [next week](#).