

## The Secretary of Energy Washington, DC 20585

September 21, 2018

The Honorable Richard Shelby Chairman Committee on Appropriations United States Senate Washington, DC 20510

Dear Mr. Chairman:

This letter report constitutes a report to Congress under section 4306(a)(3)(A) of the Atomic Energy Defense Act (50 U.S.C. § 2566), concerning the Mixed Oxide Fuel Fabrication (MOX) Facility under construction at the Department of Energy's (DOE or Department) Savannah River Site (SRS) near Aiken, South Carolina.

Construction of the MOX Facility is ongoing. However, numerous independent studies as well as analyses by the Department show that the MOX Facility is significantly behind schedule and will cost significantly more than previously anticipated. The Facility has not produced mixed plutonium-uranium oxide (MOX) fuel and the "MOX production objective" – essentially, production of one metric ton of MOX fuel per year<sup>1</sup> – will not be met in 2018. The Department continues to suspend further transfers of defense plutonium and defense plutonium materials (weapons-usable plutonium)<sup>2</sup> to South Carolina to be processed by the MOX Facility.

On May 10, 2018, I waived the requirement that funds made available for the MOX Facility in fiscal year 2018 be used for construction and project support activities relating to the Facility at SRS, pursuant to section 3121 of the National Defense Authorization Act for Fiscal Year 2018 (NDAA) and section 309 of the Consolidated Appropriations Act, 2018.<sup>3</sup> In accordance with those laws, I also provided a commitment and certification to the congressional defense committees to support the waiver, and I submitted the lifecycle cost estimate used to make the certification to the congressional appropriations committees.

On May 14, 2018, the Department of Energy's National Nuclear Security Administration (DOE/NNSA) issued a partial stop work order to limit certain expenditures on the MOX Facility. On June 7, 2018, the U.S. District Court granted the State of South Carolina's motion for a preliminary injunction and required DOE to continue construction of the MOX Facility.<sup>4</sup> We have appealed the District Court's injunction and our appeal is

<sup>&</sup>lt;sup>1</sup> The "MOX production objective" is essentially defined in section 4306(h)(1) of the Atomic Energy Defense Act as production of one metric ton of MOX fuel per year.

<sup>&</sup>lt;sup>2</sup> The terms "defense plutonium" and "defense plutonium materials" are defined in section 4306(h)(3) of the Atomic Energy Defense Act to mean weapons-usable plutonium.

<sup>&</sup>lt;sup>3</sup> P.L. 115-91; P.L. 115-141.

<sup>&</sup>lt;sup>4</sup> South Carolina v. United States, Civ. No. 1:18-cv-01431-JMC (D.C. S. Car., Aiken Div.) (preliminary injunction, June 7, 2018).

pending.<sup>5</sup> On June 11, 2018, NNSA cancelled the partial stop work order and authorized construction to proceed.

DOE plans to submit information to Congress on options for removing from the State of South Carolina those amounts of defense plutonium or defense plutonium materials transferred to South Carolina after April 15, 2002. In this regard, DOE is down-blending (diluting) over six metric tons of surplus weapons-usable plutonium for disposal at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico, and has begun shipments of this material to WIPP. This process will remove surplus weapons-usable plutonium from South Carolina and ensure that the surplus plutonium is never again readily useable in a nuclear weapon. At the same time, we are planning to install additional equipment for processing plutonium for removal from South Carolina and to increase the rate at which this removal can be carried out. We have also developed a plan to remove one metric ton of surplus defense plutonium from the State of South Carolina no later than January 1, 2020. The material will be repurposed for future pit production and staged temporarily at other DOE facilities. In addition, the Department is pursuing the dilute (down-blend) and dispose approach for an additional 34 metric tons of surplus plutonium previously designated for MOX fuel.

DOE is grateful for the interest of Congress in supporting DOE/NNSA's national security missions. DOE is working diligently to securely process and remove surplus plutonium from the State of South Carolina and to disposition surplus, weapons-usable plutonium. SRS plays a key role in U.S. national security and DOE remains committed to its enduring mission. If you have any questions, or need additional information, please contact Ms. Bridget Forcier, Office of the Chief Financial Officer, at (202) 586-0176.

Sincerely,

RICK PERRY Rick Perry

cc: The Honorable Patrick Leahy Vice Chairman

<sup>5</sup> South Carolina v. United States, et al., No. 18-1684(1:18-cv-01431-JMC) (4<sup>th</sup> Cir.) (filed June 15, 2018; order denying stay pending appeal and granting motion to expedite the appeal entered June 29, 2018.)

<sup>6</sup> This plutonium was not previously slated for fabrication into MOX fuel. To date, DOE has down-blended 77 kilograms (kg) – .077 metric tons – of surplus, weapons-usable plutonium, shipped 61 kg (.061 metric tons) of down-blended plutonium to WIPP, and shipped approximately 10 kg (.010 metric tons) to other sites outside of South Carolina for use in other DOE programs.

<sup>&</sup>lt;sup>7</sup> In addition to a series of Interim Action decisions to prepare certain plutonium for disposal at WIPP, the Department issued a Record of Decision in March 2016 to prepare six metric tons of surplus plutonium for disposal at WIPP. 81 F.R.19588 (Apr.5, 2016).

<sup>&</sup>lt;sup>8</sup> Most of this plutonium is not located at SRS.