

Recommendation 373
Plutonium Downblend Acceleration

Background

In 2002 legislation was approved that required Department of Energy (DOE) to remove from South Carolina plutonium shipped to Savannah River Site (SRS) and intended to be processed into nuclear power fuel in the Mixed Oxide Fuel (MOX) facility under construction at that time. In 2016 a downblend process was established in K Area and SRS began processing surplus plutonium. With the cancellation of the MOX Facility in 2018, DOE was in default of the statutory requirement in the 2002 legislation to remove plutonium from the State of South Carolina by 2022. The State of South Carolina sued DOE to collect the stipulated penalties of approximately 600 million dollars plus an additional 100 million dollars per year going forward. In 2020 a settlement was negotiated which extended the deadline to remove the plutonium to 2037. In December of 2019 National Nuclear Security Administration approved Critical Decision-1 a capital project to provide three additional glove boxes, support systems, fire protection and a HEPA/Electrical Building to support increased downblending production needed to meet the new statutory deadline of 2037 for removing plutonium from South Carolina.

Recommendation

The CAB recommends that DOE give priority and support sufficient to meet the statutory requirement of removing 9.5 metric tons of plutonium by 2037 from the State of South Carolina.