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Highlights

Highlights of [GAO-04-662](#), a report to the Chairman, Subcommittee on Emerging Threats and Capabilities, Committee on Armed Services, U.S. Senate

Why GAO Did This Study

Russia's continued operation of three plutonium production reactors poses a serious proliferation threat. The Department of Energy's (DOE) Elimination of Weapons-Grade Plutonium Production program seeks to facilitate the reactors' closure by building or refurbishing replacement fossil fuel plants. This report (1) describes DOE's efforts to manage and implement the program, (2) assesses the challenges DOE faces in achieving its goal of shutting down the reactors, and (3) identifies DOE's current expenditures and projected program costs.

What GAO Recommends

GAO recommends, among other things, that DOE (1) reach agreement with Russia on the steps that must be taken to shut down the reactors and the conditions necessary to complete the fossil fuel plants; (2) amend the reactor shutdown agreement to reflect DOE's revised completion dates for the fossil fuel plants; and (3) develop a plan, in conjunction with Russia, to address the problem of employing nuclear workers who will lose their jobs when the reactors are closed.

DOE agreed to implement our recommendations. The Department of State disagreed with our recommendation that DOE consider seeking funds from Russia to construct the fossil fuel plants. DOE plans to seek financial support provided that it does not delay the program.

www.gao.gov/cgi-bin/getrpt?GAO-04-662.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Gene Aloise at (202) 512-3841 or aloise@gao.gov.

NUCLEAR NONPROLIFERATION

DOE's Effort to Close Russia's Plutonium Production Reactors Faces Challenges, and Final Shutdown Is Uncertain

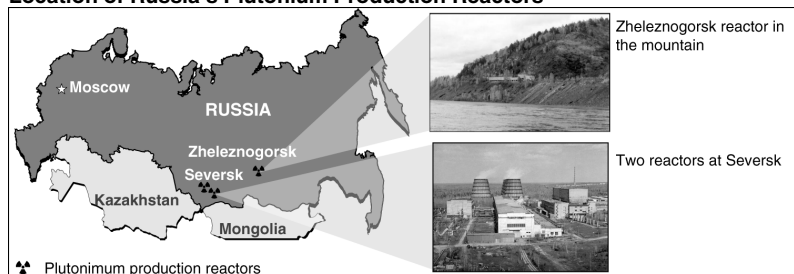
What GAO Found

DOE is financing and managing the construction of two fossil fuel plants in Russia that will replace the heat and electricity that will be lost with the shutdown of Russia's three plutonium production reactors. DOE (1) has developed an overall plan to manage its program, (2) has selected two U.S. contractors to oversee the construction of replacement fossil fuel plants, and (3) is working with its U.S. contractors to review specific design and construction plans for the plants. DOE officials expressed concern that the number of organizations, 17, involved in the program makes coordination difficult and has led to delays. Additionally, DOE and U.S. contractor officials said that the primary Russian contractor may not have adequate experience and currently lacks enough staff to implement its part of the program.

Final shutdown of the reactors is uncertain because DOE faces a number of challenges in implementing its program, including (1) ensuring Russia's commitment to the nonproliferation and safety goals of the program, (2) clarifying the existing reactor shutdown agreement, and (3) working with Russia to find employment for thousands of Russian nuclear workers who will lose their jobs when the reactors are closed. Russia's rejection of DOE's proposals to reduce the amount of plutonium produced by the reactors and to improve the safety of the reactors before they are shut down raises serious questions about Russia's commitment to key program goals. Furthermore, the existing reactor shutdown agreement contains shutdown dates that do not reflect DOE's planned program schedule. Finally, the challenge of finding employment for Russian nuclear workers could undermine the program by creating the potential for Russia to continue operating the reactors longer than necessary to ensure jobs for the workers. DOE has not developed a plan to address this issue.

As of December 31, 2003, DOE had spent \$7.8 million—about 4 percent of available funds on planning and developing the program, including travel, overhead, project administration, and document translation costs. Regarding future program costs, DOE officials told us that they expect the projected costs to build the replacement fossil fuel plants to be significantly higher than their original estimate of \$466 million, possibly as much as \$1 billion.

Location of Russia's Plutonium Production Reactors



Sources: GAO and DOE.