DEPARTMENT OF ENERGY

Concerns with Major Construction Projects at the Office of Environmental Management and NNSA

What GAO Found

In response to GAO reports over the past few years on management weaknesses in major projects (i.e., those costing $750 million or more), the Department of Energy (DOE) has undertaken a number of reforms since March 2009, including those overseen by the Office of Environmental Management (EM) and the National Nuclear Security Administration (NNSA). For example, DOE has updated program and project management policies and guidance in an effort to improve the reliability of project cost estimates, better assess project risks, and better ensure project reviews that are timely and useful, and that identify problems early. In addition to actions taken to improve project management, in its 2012 work, GAO has noted DOE’s progress in managing the cost and schedule of nonmajor projects—those costing less than $750 million. DOE’s actions to improve project management are promising, but their impact on meeting cost and schedule targets is not yet clear. Because all ongoing major projects have been in construction for several years, neither EM nor NNSA has a major project that can demonstrate the impact of DOE’s recent reforms.

GAO’s ongoing review of NNSA’s Plutonium Disposition Program, including examining recent problems with the ongoing construction of the Mixed Oxide (MOX) Fuel Fabrication Facility and the Waste Solidification Building at the Savannah River Site in South Carolina, has resulted in some preliminary observations that highlight the need for continued efforts by DOE to improve contract and project management. DOE is currently forecasting an increase in the total project cost for the MOX facility from $4.9 billion to $7.7 billion and a delay in the start of operations from October 2016 to November 2019. Specifically, DOE is evaluating a project baseline change proposal prepared by NNSA’s contractor for the MOX facility—a major project. The cost increase and schedule delay will not be known until DOE completes its review of the contractor’s proposal and DOE’s project oversight office completes an independent cost estimate of the project. With regard to the Waste Solidification Building—a nonmajor project—DOE approved a revised performance baseline in December 2012 to increase the cost from the initial estimate of $344.5 million to $414.1 million and a delay in the start of operations from September 2013 to August 2015. GAO’s ongoing work is focused on several areas, including the following:

- critical system components’ design adequacy,
- understanding the nuclear supplier base,
- changes in project scope,
- the effectiveness of project reviews; and
- lifecycle cost estimates for the Plutonium Disposition Program.

GAO plans to report on this ongoing work later this year.