

GAO Highlights

Highlights of [GAO-17-577](#), a report to congressional committees

Why GAO Did This Study

Uranium is crucial to our nation's ability to maintain its nuclear weapons stockpile. NNSA processes uranium to meet this need. In 2004, NNSA began plans to build a new UPF that would consolidate capabilities currently housed in deteriorating buildings; by 2012, the project had a preliminary cost of \$4.2 billion to \$6.5 billion. To control rising costs, NNSA changed its approach in 2014 to reduce the scope of the new UPF and move uranium processing capabilities once intended for the UPF into existing buildings. The broader uranium program also includes the needed repairs and upgrades to these existing buildings.

The National Defense Authorization Act for Fiscal Year 2013 as amended includes a provision for GAO to periodically assess the UPF. This is the fifth report and (1) describes the status of NNSA's efforts to develop a revised scope of work, cost estimate, and schedule for the UPF project, and (2) examines the extent to which NNSA has developed a complete scope of work, life-cycle cost estimate, and integrated master schedule for the overall uranium program. GAO reviewed program documents on planning, strategy, cost, and implementation and interviewed program officials to examine the program's scope, cost and schedule.

What GAO Recommends

GAO recommends that NNSA set a time frame for completing the scope of work, life-cycle cost estimate, and integrated master schedule for the overall uranium program. NNSA generally agreed with the recommendation and has ongoing efforts to complete these actions.

View [GAO-17-577](#). For more information, contact David Trimble at (202) 512-3841 or trimbled@gao.gov.

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MODERNIZING THE NUCLEAR SECURITY ENTERPRISE

A Complete Scope of Work Is Needed to Develop Timely Cost and Schedule Information for the Uranium Program

What GAO Found

The National Nuclear Security Administration (NNSA) has made progress in developing a revised scope of work, cost estimate, and schedule for its project to construct a new Uranium Processing Facility (UPF), according to NNSA documents and program officials. As of May 2017, NNSA had developed and approved a revised formal scope of work, cost, and schedule baseline estimates for four of the seven subprojects into which the project is divided. NNSA expects to approve such baseline estimates for the other three—including the two largest subprojects—by the second quarter of fiscal year 2018. NNSA also plans to validate the estimates by then through an independent cost estimate.

NNSA, however, has not developed a complete scope of work, life-cycle cost estimate (i.e., a structured accounting of all cost elements for a program), or integrated master schedule (i.e., encompassing individual project schedules) for the overall uranium program, and it has no time frame for doing so. In particular, it has not developed a complete scope of work for repairs and upgrades to existing buildings in which NNSA intends to house some uranium processing capabilities and has not done so for other key program elements. For example:

- The scope of work for a portion of the upgrades and repairs will not be determined until after fiscal year 2018, when NNSA expects to conduct seismic and structural assessments to determine what work is needed to address safety issues in existing buildings.
- NNSA has developed an initial implementation plan that roughly estimates a cost of \$400 million over the next 20 years for the repairs and upgrades, but a detailed scope of work to support this estimate is not expected to be fully developed except on an annual basis in the year(s) that immediately precedes the work.

Because NNSA has not developed a complete scope of work for the overall uranium program, it does not have the basis to develop a life-cycle cost estimate or an integrated master schedule. Successful program management depends in part on developing a complete scope of work, life-cycle cost estimate, and an integrated master schedule, as GAO has stated in its cost estimating and schedule guides. In previous work reviewing other NNSA programs, GAO has found that when NNSA did not have a life-cycle cost estimate based on a complete scope of work, the agency could not ensure its life-cycle cost estimate captured all relevant costs, which could result in cost overruns. The revised cost estimate that NNSA is developing for the new UPF will be an essential component of a life-cycle cost estimate for the overall program. However, for other program elements, NNSA has either rough or no estimates of the total costs and has not set a time frame for developing these costs. Federal internal control standards call for management to use quality information to achieve an entity's objectives, and among other characteristics, such information is provided on a timely basis. Without setting a time frame to complete the scope of work and prepare a life-cycle cost estimate and integrated master schedule for the program, NNSA does not have reasonable assurance that decision makers will have timely access to essential program management information—risking unforeseen cost escalation and delays.