GAO Highlights

Highlights of GAO-21-28, a report to congressional committees

December 2020

URANIUM MANAGEMENT

Actions to Mitigate Risks to Domestic Supply Chain Could Be Better Planned and Coordinated

Why GAO Did This Study

NNSA has several defense needs for enriched uranium, including low-enriched uranium to produce tritium for nuclear weapons. To meet these needs, NNSA relies on commercial sectors of the domestic uranium industry, such as uranium mining or enrichment, which make up a supply chain for unobligated uranium. However, this industry faces commercial viability risks. In April 2020, the President's Nuclear Fuel Working Group released a strategy to mitigate risks to the domestic uranium industry. This working group includes DOE, the Department of Defense, and other agencies.

Senate Report 115-262 included a provision that GAO review NNSA's planning for the future supply of unobligated enriched uranium. This report examines (1) risks agencies and others have identified to the unobligated uranium supply chain and agency actions to mitigate those risks, and (2) the extent to which the Nuclear Fuel Working Group's risk mitigation strategy incorporates desirable characteristics of a national strategy. GAO analyzed key NNSA and DOE planning documents and interviewed NNSA and other agency officials and industry representatives.

What GAO Recommends

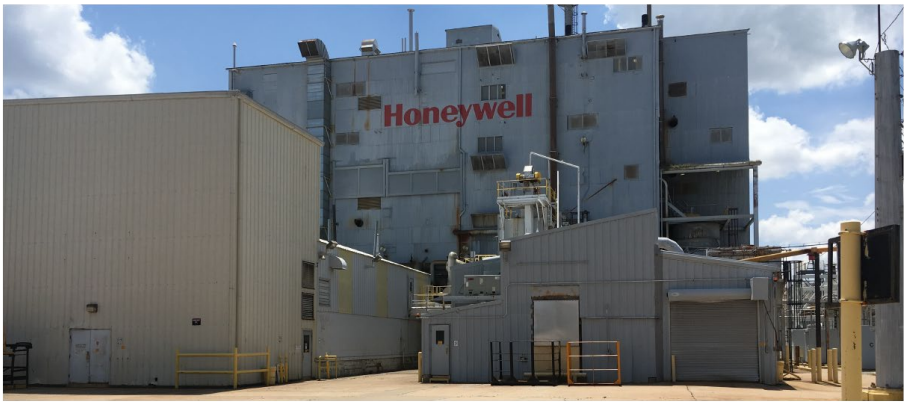
GAO is making three recommendations, including that DOE improve its cost estimate to support future funding requests for the proposed uranium reserve and ensure its implementation plan for the strategy addresses each of the desirable characteristics of a national strategy. DOE concurred with GAO's recommendations.

View GAO-21-28. For more information, contact. Allison Bawden at (202) 512-3821 or bawdena@gao.gov.

What GAO Found

Federal agencies, including the Department of Energy (DOE) and the separately organized National Nuclear Security Administration (NNSA) within DOE, and uranium industry representatives have identified risks to the commercial supply chain for uranium needed for defense purposes. Such uranium may need to be mined domestically and enriched using U.S. technology to be free of obligations for the peaceful use of uranium and certain technology imported under international agreements. Identified risks to the unobligated uranium supply chain include (1) possible loss of domestic uranium mining capabilities and (2) possible challenges in re-starting the only facility in the United States for converting natural uranium into a form suitable for use in enrichment operations. Further, the U.S. has not had an operating enrichment capability that uses U.S. technology since 2013.

Idle Domestic Plant for Converting Uranium to a Form Suitable for Enrichment



Source: ConverDyn. | GAO-21-28

DOE and NNSA have initiated actions officials believe will mitigate such risks to the unobligated uranium supply chain. For example, DOE and NNSA have both taken steps to reestablish a domestic enrichment capability with U.S. technology. In addition, DOE has proposed creation of a domestic uranium reserve to help support the domestic uranium mining and conversion industries until market conditions improve. DOE's fiscal year 2021 budget request includes $150 million for the reserve. However, we cannot conclude that the estimate is reasonable because it is unclear how the funding needs for the reserve were determined. By providing a more complete analysis to support future funding requests for the reserve, DOE could better provide assurance that such requests would achieve objectives.

The Nuclear Fuel Working Group's strategy to mitigate risks to the domestic uranium industry does not fully incorporate all desirable characteristics GAO has identified for a national strategy. For example, it does not identify (1) the level of resources needed to support proposed actions or (2) an interagency coordinating mechanism. DOE is developing an implementation plan for the strategy, but DOE officials provided conflicting statements about the extent to which the agency will coordinate interagency implementation.