



Highlights of GAO-07-1010, a report to the Honorable Jon C. Porter, House of Representatives

August 2007

## YUCCA MOUNTAIN

# DOE Has Improved Its Quality Assurance Program, but Whether Its Application for a NRC License Will Be High Quality Is Unclear

### Why GAO Did This Study

Nuclear power reactors generate highly radioactive waste. To permanently store this waste, the Department of Energy (DOE) has been working to submit a license application to the Nuclear Regulatory Commission (NRC) for a nuclear waste repository at Yucca Mountain about 100 miles from Las Vegas, Nevada. Although the project has been beset with delays, in part because of persistent problems with its quality assurance program, DOE stated in July 2006 that it will submit a license application with NRC by June 30, 2008. NRC states that a high-quality application needs to be complete, technically adequate, transparent by clearly justifying underlying assumptions, and traceable back to original source materials.

GAO examined (1) DOE's development of its schedule for submitting a license application and the stakeholders with whom it consulted, (2) NRC's assessment of DOE's readiness to submit a high-quality application, and (3) DOE's progress in addressing quality assurance recommendations and challenges identified in GAO's March 2006 report. GAO reviewed DOE's management plan for creating the license application, reviewed correspondence and attended prelicensing meetings between DOE and NRC, and interviewed DOE managers and NRC on-site representatives for the Yucca Mountain project. In commenting on a draft of the report, both DOE and NRC agreed with the report.

[www.gao.gov/cgi-bin/getrpt?GAO-07-1010](http://www.gao.gov/cgi-bin/getrpt?GAO-07-1010).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mark Gaffigan, (202) 512-3841, gaffiganm@gao.gov.

### What GAO Found

The director of DOE's Office of Civilian Radioactive Waste Management set the June 30, 2008, date for filing the license application with NRC in consultation with the DOE and contractor managers for the Yucca Mountain project. DOE officials told us that external stakeholders were not consulted because there was neither a legal requirement nor a compelling management reason to do so. According to the director, the June 2008 schedule is achievable because DOE has already completed a large amount of work, including the completion of a draft license application in 2005 that DOE decided not to submit to NRC.

NRC officials believe it is likely that DOE will submit a license application by June 30, 2008, but until NRC receives the application, officials will not speculate about whether it will be high quality. NRC has not seen a draft of the license application, and NRC's long-standing practice is to maintain an objective and neutral position toward a future application until it is filed. To help ensure that DOE understands its expectations, NRC has, among other things, held periodic prelicensing management and technical meetings with DOE.

DOE has made progress in resolving the quality assurance recommendations and challenges identified in GAO's March 2006 report. For example, DOE has replaced the one-page summary of performance indicators that GAO had determined was ineffective with more frequent and rigorous project management meetings. DOE has addressed the management challenges GAO identified to varying degrees. For example, regarding management continuity, DOE has worked to fill and retain personnel in key management positions, such as the director of quality assurance. However, for various reasons—including the long history of recurring problems and likely project leadership changes in January 2009 when the current administration leaves office—it is unclear whether DOE's actions will prevent these problems from recurring.

### Major Milestones in the Yucca Mountain Project

