

No: 14-069

October 16, 2014

CONTACT: David McIntyre, 301-415-8200

NRC Staff Issues Volume 3 of Yucca Mountain Safety Evaluation Report

The Nuclear Regulatory Commission staff has published Volume 3 of its safety evaluation report on the proposed underground geologic nuclear waste repository at Yucca Mountain, Nev.

Volume 3 covers the period after a repository at Yucca Mountain would be permanently closed should NRC authorize construction following completion of the remaining steps in the licensing process. Volume 3 contains the staff's finding that the Department of Energy's repository design meets the requirements that apply after the repository is permanently closed, including but not limited to the post-closure performance objectives in NRC's regulations (in 10 CFR Part 63, Subpart E). These performance objectives include the requirement that the repository be composed of multiple barriers to isolate radioactivity from the environment. The staff also found the proposed repository design meets the NRC's limits or standards (in 10 CFR Part 63, Subpart L) for individual protection, human intrusion and groundwater protection.

The Department of Energy submitted its Yucca Mountain application in June 2008. The NRC staff published Volume 1 (General Information) of the safety evaluation report in August 2010. After DOE moved to withdraw the application and Congress stopped appropriating funds for the NRC's review, the agency closed out its application review and published three technical evaluation reports containing the staff's technical analyses to that point but no regulatory conclusions. The adjudication of nearly 300 contentions filed by various parties contesting the application was also suspended in September 2011.

The U.S. Court of Appeals for the District of Columbia Circuit ordered the NRC in August 2013 to resume the licensing process using currently available funding appropriated from the Nuclear Waste Fund. That court order led to today's publication of Volume 3. The staff expects to publish volumes 2 (Repository Safety Before Permanent Closure), 4 (Administrative and Programmatic Requirements) and 5 (License Specifications) by January 2015, as they are completed.

Publication of Volume 3 does not signal whether the NRC might authorize construction of the repository. A final licensing decision, should funds beyond those currently available be appropriated, could come only after completion of the safety evaluation report, a supplement to the Department of Energy's environmental impact statement, hearings on contentions in the adjudication, and Commission review.

NUREG 1949, Safety Evaluation Report Related to Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada, Volume 3, is now publicly available in the

NRC's ADAMS online database as [ML14288A121](#). More information on the [Yucca Mountain licensing process](#) is available on the NRC website.