NRC Publishes Final Two Volumes of Yucca Mountain Safety Evaluation

The Nuclear Regulatory Commission staff has published volumes two and five of its safety evaluation report on the geologic high-level nuclear waste repository proposed for Yucca Mountain in Nevada.

Publication of these volumes completes the technical safety review of the Department of Energy’s Yucca Mountain application. The safety evaluation report includes the staff’s recommendation that the Commission should not authorize construction of the repository because DOE has not met certain land and water rights requirements identified in Volume 4, published in December, and a supplement to DOE’s environmental impact statement has not yet been completed.

Volume 2 covers repository safety before permanent closure. It contains the staff’s conclusion that with reasonable assurance, subject to proposed conditions, DOE’s application meets the NRC’s regulatory requirements in that area. Volume 5 covers proposed conditions on the construction authorization, probable subjects of license specifications, and the staff’s overall conclusions.

Completion of the safety evaluation report does not represent an agency decision on whether to authorize construction. A final licensing decision, should funds beyond those currently available be appropriated, could come only after completion of a supplement to the Department of Energy’s environmental impact statement, hearings on contentions in the adjudication, and Commission review.

DOE 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. The NRC subsequently published Volume 3 (Repository Safety After Permanent Closure) on Oct. 16, 2014, and Volume 4 (Administrative and Programmatic Requirements) on Dec. 18.