

# Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 63

[Docket No. PRM-63-1]

#### State of Nevada; Denial of a Petition for Rulemaking

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Petition for rulemaking: denial.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking submitted by the State of Nevada. The petitioner requests that the NRC amend its regulations governing the disposal of high-level radioactive waste in a proposed geologic repository at Yucca Mountain, Nevada. The petitioner believes that the present regulations are deficient because, in petitioner's view, they do not provide the regulatory framework to ensure that the repository isolates high-level radioactive waste over the long term primarily by geologic means and they do not demand that the applicant provide an "affirmative safety case" for the repository. These deficiencies, in petitioner's view, indicate that the regulations are not in full compliance with the Nuclear Waste Policy Act of 1982, as amended (NWPAA), and/or the Atomic Energy Act of 1954, as amended (AEA). The NRC is denying the petition because: petitioner's assertion that Part 63 is not in full compliance with NWPAA or AEA is without substance; the petition does not appear to present significant new factual information or policy recommendations that the Commission did not consider in the rulemaking which established Part 63, and it would be an unwise expenditure of resources to reconsider issues resolved in that rulemaking.

**ADDRESSES:** Copies of the petition for rulemaking and the NRC's letter to the petitioner are available on NRC's rulemaking Web site at <http://ruleforum.llnl.gov>. For information about the interactive rulemaking Web

site, contact Carol Gallagher (301) 415-5905 or Toll Free: 1-800-368-5642; e-mail: [cag@nrc.gov](mailto:cag@nrc.gov). The documents may also be examined at the NRC Public Document Room (PDR), Room O-1F23, 11555 Rockville Pike, Rockville, MD.

The NRC maintains an Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. These documents may be accessed through NRC's Public Electronic Reading Room on the Internet at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS, or if there are problems in accessing the documents located in ADAMS, contact the NRC PDR Reference staff at 1-800-397-4209, or 301-415-4737; or by e-mail to: [pdr@nrc.gov](mailto:pdr@nrc.gov).

#### FOR FURTHER INFORMATION CONTACT:

Timothy McCartin, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-7285 or Toll Free: 1-800-368-5642, e-mail: [tjm3@nrc.gov](mailto:tjm3@nrc.gov); or Clark Prichard, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-6203 or Toll Free: 1-800-368-5642, e-mail: [cwp@nrc.gov](mailto:cwp@nrc.gov).

#### SUPPLEMENTARY INFORMATION:

##### The Petition

On July 12, 2002, the State of Nevada submitted a "Petition to Institute Rulemaking: Part 63" (petition) which was docketed as a petition for rulemaking under 10 CFR 2.802 of the Commission's regulations (PRM-63-1). The petition requests amendments to 10 CFR Part 63, NRC's regulations governing the disposal of high-level radioactive waste (HLW) in a proposed geologic repository at Yucca Mountain, Nevada (YM). Petitioner believes that its proposed amendments are needed to bring Part 63 into full compliance with the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10101 *et seq.* (NWPAA), and to ensure that the Part 63 regulations, if met by the Department of Energy (DOE or Applicant), will provide reasonable assurance of the safety of the repository. Petition at 3.

Specifically, the petition requests amendments to Part 63 as discussed below.

#### 1. Section 63.15 Site Characterization

At present, § 63.15(a) provides:

(a) DOE shall conduct a program of site characterization with respect to the Yucca Mountain site before it submits an application for a license to be issued under this part.

Petitioner requests that the following two sentences be added:

DOE's site characterization shall include criteria, developed pursuant to section 112(a) of the NWPAA, to be used to determine the suitability of the Yucca Mountain site for the location of a geologic repository. Such criteria shall ensure that the geologic setting of the Yucca Mountain site is the primary barrier against the release of radionuclides to the biosphere from the multi-barrier repository system.

Petition at 40.

#### 2. Section 63.21 Content of Application

Petitioner requests that the first sentence of paragraph (a) be modified, and new paragraphs (c) and (d) be added, as follows:

(a) An application consists of general information, a Safety Analysis Report, documentation propounding an affirmative safety case for the Yucca Mountain repository, and documentation that the site does not have any material disqualifying conditions. \* \* \*

\* \* \* \* \*

(c) The affirmative safety case must include:

(1) A realistic assessment of system evolution and radionuclide migration, drawing on natural and historical analogs.

(2) Documentation evidencing an overall understanding by the applicant of the key safety-relevant factors in the repository system, communicated in a manner that aids in public understanding.

(3) Disaggregated dose projections with documentation of which particular factors or sub-scenarios can lead to large potential doses, explaining as well the likelihood of occurrence of such scenarios.

(4) Use of multiple performance measures showing, at a minimum, the effects of each isolation barrier and the spatial and temporal distribution of radionuclides within each component of the repository system.

(5) A simplified interpretative or insight model containing only the key processes affecting safety, for use by the Commission and the public to assess the safety of the repository.

(6) Documentation of the major conservatisms and optimisms in the total system performance analysis, and quantification of their impacts with respect to realistic post-closure assumptions.

(7) Documentation of extreme conditions which might give rise to doses above