

are inconsistent with the applicable regulations. The commenters recommended that the Yucca Mountain Review Plan be revised to more closely reflect the applicable regulations to minimize questions of interpretation. The commenters also suggested that the Yucca Mountain Review Plan directly reference appropriate regulations rather than paraphrasing them.

For example, the term "safety case" is used throughout the draft Yucca Mountain Review Plan, but is not defined either within the review plan or in 10 CFR part 63. One commenter stated that this term generally addresses more than a compliance demonstration, and confusion about its use may adversely affect both preparation and review of an application.

Commenters noted that terms used in the draft Yucca Mountain Review Plan were confused with common industry terms. For example, the terms "technical specifications" and "license specifications" are erroneously used interchangeably. "License specifications" is used and defined in 10 CFR part 63 and its use in the Yucca Mountain Review Plan should be consistent with this definition. Also, the term "license conditions" is used interchangeably with the term "license specifications." In 10 CFR 63.43, license specification is defined in terms of license condition, but the Yucca Mountain Review Plan does not provide sufficient distinction between the two terms.

One commenter recommended replacing the term "performance-based" with "experimental" due to the lack of experience in storage for thousands of years. The commenter noted that use of the phrases "risk-informed" and "performance-based" was problematic because risk should mean probability times consequence, but this was not apparent in the Yucca Mountain Review Plan. The commenter further noted that the phrase "risk-informed, performance-based," as applied over a period of thousands or millions of years require a workable definition.

Two commenters expressed concern with the discussion of "open items" or "confirmatory items" that might result from the licensing review. One argued that these items could be used to inappropriately accommodate licensing deficiencies and asked for assurance that such action would be prevented.

Another commenter requested that the term "important to performance" be defined consistent with 10 CFR part 63 and that the terms "important to safety" and "important to waste isolation" be included in the Yucca Mountain Review Plan glossary.

The commenters included a number of additional suggestions for improving Yucca Mountain Review Plan consistency and the effectiveness of the glossary.

*Response.* Terminology should be used consistently throughout the Yucca Mountain Review Plan and should be consistent with regulations. Revisions were made to the Yucca Mountain Review Plan, as appropriate, to address terminology concerns raised by commenters.

The term "safety case" has been removed from the Yucca Mountain Review Plan and, generally, has been replaced with the term "license application." This change is more consistent with language in 10 CFR part 63; however, the removal of the term "safety case" should not be viewed as a lessening of an emphasis on health and safety for the repository.

Discussion and use of the terms "technical specifications," "license specifications," and "license conditions" have been clarified throughout the Yucca Mountain Review Plan to be consistent with 10 CFR 63.42 and 62.43. License conditions include license specifications that are derived from analyses and evaluations included in the application.

In developing 10 CFR part 63 and the Yucca Mountain Review Plan, NRC staff sought to establish a coherent body of risk-informed, performance-based criteria for Yucca Mountain that is compatible with the Commission's overall philosophy of risk-informed, performance-based regulations. ["Use of Probabilistic Risk Assessment Methods in Nuclear Regulatory Activities—Final Policy Statement" (60 FR 42622, August 16, 1995).] Stated succinctly, risk-informed, performance-based regulation is an approach in which risk insights, engineering analysis and judgment (e.g., defense in depth), and performance history are used to: (i) Focus attention on the most important activities; (ii) establish objective criteria for evaluating performance; (iii) develop measurable or calculable parameters for monitoring system and licensee performance; (iv) provide flexibility to determine how to meet the established performance criteria in a way that will encourage and reward improved outcomes; and (v) focus on the results as the primary basis for regulatory decision-making.

NRC defines risk as probability times consequence. Further, 10 CFR part 63 establishes the regulatory period of interest for a Yucca Mountain repository at 10,000 years, consistent with the Nuclear Waste Policy Act.

With respect to the concerns about possible misuse of "open" and

"confirmatory" items, NRC will review the application to determine whether the requisite regulatory showing has been made and impose conditions, as necessary to address confirmatory items. "Open" items that relate to information required for regulatory findings must be addressed by DOE during the review.

The term "important to performance" has been replaced with "important to safety" or "important to waste isolation," as appropriate, consistent with 10 CFR part 63.

These and other changes were made throughout the Yucca Mountain Review Plan to clarify the guidance and provide consistency with regulatory requirements.

*Issue 2:* Is the Yucca Mountain repository program being conducted consistent with legal requirements?

*Comment.* One commenter stated that the Yucca Mountain Review Plan violates a number of legislative mandates, Federal laws, an executive order, State and local constitutions, and an international treaty. Such documents include: The Nuclear Waste Policy Act; the National Environmental Policy Act; the Federal Administrative Procedures Act; the Safe Drinking Water Act; the Federal Facilities Management Act; Executive Order 12898 ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population"); the Ruby Valley Treaty of 1863; and regulations related to uncompensated takings.

*Response.* The Yucca Mountain Review Plan is a guidance document that sets forth an approach for NRC staff to determine whether the regulatory requirements of 10 CFR part 63 have been met. The regulations at 10 CFR part 63 were adopted in accordance with the laws of the United States. Any challenges to those regulations should be raised in the appropriate forum and are not appropriate for comment here.

No changes have been made to the Yucca Mountain Review Plan as a result of this comment.

## 10.2 Nature of Wastes To Be Disposed of in a High-Level Waste Repository

*Issue:* What types of radioactive wastes may be emplaced in a repository for high-level radioactive waste at Yucca Mountain?

*Comment.* One commenter asked several questions regarding the types and forms of waste that would be eligible for disposal in a repository for high-level radioactive waste at Yucca Mountain, Nevada. The questions included: (i) Whether liquid wastes could be interred; (ii) whether low-level or intermediate-level wastes could be interred; (iii) whether contaminated