

applicants. As the commenter points out, "staff regulatory guides are not regulations, do not have the force of regulations, and when challenged, are considered only one way in which an applicant may meet the regulations."

Finally, the commenter really appears to be objecting to the NRC's risk-informed, performance-based approach in this rulemaking in lieu of the deterministic approach for determining a design earthquake embodied in Appendix A to 10 CFR Part 100. The overall performance criteria for protection against environmental conditions and natural phenomena in the design of Part 72 facilities are contained in 10 CFR 72.122(b) of the NRC's regulations. In particular, § 72.122(b)(2)(i) provides:

Structures, systems, and components important to safety must be designed to withstand the effects of natural phenomena such as earthquakes * * * without impairing their capability to perform their intended design functions. The design bases for these structures, systems, and components must reflect:

(A) Appropriate consideration of the most severe of the natural phenomena reported for the site and surrounding area, with appropriate margins to take into account the limitations of the data and the period of time in which the data have accumulated; and

(B) Appropriate combinations of the effects of normal and accident conditions and the effects of natural phenomena.

These performance criteria are supplemented by the requirements of 10 CFR 72.103 governing selection of a site and determination of a DE. This new regulation provides specific siting requirements for an ISFSI or MRS instead of referencing another part of the regulations (Appendix A to Part 100). This new regulation also reduces the level of detail by placing only basic requirements in the rule and providing the details on methods acceptable for meeting the requirements in an accompanying guidance document. Thus, the new 10 CFR 72.103(f) establishes basic requirements for determining a DE for use in the design of structures, systems, and components of the ISFSI or MRS. These regulations include a requirement that the geological, seismological, and engineering characteristics of a proposed site and its environs be investigated in sufficient scope and detail to provide sufficient information to support evaluations performed to arrive at estimates of the DE (§ 72.103(f)(1)); a requirement that a DE be determined for the site (§ 72.103(f)(2)); and a requirement that uncertainties be addressed through an appropriate analysis, such as a probabilistic seismic hazard analysis or

suitable sensitivity analyses (§ 72.103(f)(2)(i)). The regulation further requires determinations of the potential for surface tectonic and nontectonic deformations (§ 72.103(f)(2)(ii)); the design bases for seismically induced floods and water waves (§ 72.103(f)(2)(iii)); and the siting factors for other design conditions, such as liquefaction potential (§ 72.103(f)(2)(iv)), as well as a requirement that the DE must have a value for the horizontal ground motion of no less than 0.10 g with the appropriate response spectrum (§ 72.103(f)(3)). More specific guidance for meeting these standards, including guidance on an acceptable reference probability, is provided in Regulatory Guide 3.73 (formerly DG-3021).

Determining whether an applicant has complied with these performance standards may be more difficult than would be the case with a prescriptive regulation; however, that does not mean that the NRC has "unbridled discretion" in deciding whether the standards are met nor that the standards (as opposed to the guidance) are not binding. The NRC uses informed technical judgment to determine if an application has satisfactorily met the standards. The NRC's rationale and judgment are expressed in a safety evaluation report (SER) subject to evaluation and potential challenge by members of the public. In the event of a hearing, a licensing board would have the technical skills necessary to evaluate any conflicting claims.

Comment 2: A commenter noted that, although the NRC's approach is similar to that used in the amendments issued for seismic evaluation for the siting of NPPs, the NRC has no compelling reason to follow that approach. First, the commenter argued, if the approach violates the APA, it should be rejected. Second, the commenter stated that because no new applications for siting NPPs have been submitted using the new requirements, the rule has not been put to the test. Finally, the commenter indicated that there are no data for ISFSIs that establish design basis ground motions, unlike the SSE for a nuclear power plant, which has at least some data to provide guidance to the NRC and the public.

Response: First, the NRC disagrees that either the amendments issued for the seismic evaluation of siting of NPPs or these Part 72 amendments have been issued in violation of the APA. See comment 1. Second, although no new license applications for siting of NPPs have been received to test the new requirements in 10 CFR § 100.23, the guidance associated with the use of probabilistic methods for siting of NPPs

(Regulatory Guide 1.165) has been used in the PSHA prepared for a proposed ISFSI site. It is also being followed by applicants for an early site permit under 10 CFR Part 52. Finally, the NRC agrees that there are limited data for ISFSIs that establish design basis ground motions because the current Part 72 regulations for seismic design of ISFSIs are conservatively based on the nuclear power plant seismic design criteria, and thus, are not risk-informed. However, experience has been gained in the design and construction of numerous facilities using the philosophy of a graded, risk-informed approach described in the standard building codes, similar to the approach proposed in the rule for ISFSIs. The graded risk-informed approach is also used by the Department of Energy in designing its facilities for seismic loads with risks varying from conventional facilities to NPPs.

Comment 3: A commenter noted that if clear seismic standards are not established in the rule, the opportunity for interested persons to participate in a licensing proceeding involving the seismic design of an ISFSI will become essentially prohibited. This is because a panoply of specific expertise is needed to evaluate the seismic design and there is only a small universe of seismic experts. Utilizing these experts is often not feasible because of the financial burden on intervenors in obtaining highly specialized expertise to analyze probabilistic seismic risks and design of nuclear facilities.

Response: The NRC believes the standards for ISFSI or MRS facility earthquake designs are clear. See the response to Comment 1. However, the NRC recognizes that the proposed use of the probabilistic methods in seismic design of ISFSIs is more complex than the current deterministic methods of 10 CFR Part 100 Appendix A, and would require specific expertise to participate in the licensing proceedings. The NRC staff's safety evaluation report (SER) that independently assesses the applicant's method of compliance with regulations is available to assist the public in evaluating the risk of the facility and could help intervenors to focus their resources. The NRC does not intend to limit public participation in the licensing process; however, the Congress has barred the use of appropriated funds to pay the expenses of, or otherwise compensate, parties who intervene in NRC regulatory or adjudicatory proceedings.

Comment 4: A commenter stated that the proposed rule placed too much stock on the integrity of the dry storage cask. The commenter indicated that of