Staff Responses to Public Comments
On Draft Regulatory Guide DG-1156, "Seismic Design Classification"

A. Specific Comments from the Nuclear Energy Institute (NEI), Dec. 4, 2006

Comment 1: In Section A, third paragraph, Appendix A to 10 CFR 100 is mentioned. This appendix is not applicable to new plants because 10 CFR 100.23 states, "The requirements in paragraphs (c) and (d) of this section apply to applications for a construction permit or operating license for a nuclear power plant pursuant to Part 50 of this chapter on or after January 10, 1997. However, for either an operating license application or holder whose construction permit was issued prior to January 10, 1997, the seismic and geologic site criteria in Appendix A to Part 100 of this chapter [continue] to apply." It is recommended that the discussion be updated to address new plants as well as the existing ones.

> **Agreed:** Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants," to Title 10, Part 100, "Reactor Site Criteria," of the *Code of Federal Regulations* (10 CFR Part 100) applies to either an operating license applicant or holder whose construction permit was issued before January 10, 1997. However, Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," applies to applicants for a design certification or combined license pursuant to 10 CFR Part 52, "Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants," or a construction permit or operating license pursuant to 10 CFR Part 50 on or after January 10, 1997. The staff of the U.S. Nuclear Regulatory Commission (NRC) has revised the third paragraph in Section A, as follows:
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>> Appendix S, "Earthquake Engineering Criteria for Nuclear Power Plants," to 10 CFR Part 50, requires that all nuclear power plants must be designed so that certain SSCs remain functional if the safe-shutdown earthquake (SSE) ground motion occurs.[1] These plant features are those necessary to ensure (1) the integrity of the reactor coolant pressure boundary, (2) the capability to shut down the reactor and maintain it in a safe shutdown condition, or (3) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the guideline exposures of 10 CFR 50.34(a)(1) or 10 CFR 100.11.
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> [1] Appendix S to 10 CFR Part 50 applies to applicants for a design certification or combined license pursuant to 10 CFR Part 52, "Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants," or a construction permit or operating license pursuant to 10 CFR Part 50 after January 10, 1997. However, the earthquake engineering criteria in Section VI of Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants," to 10 CFR Part 100, "Reactor Site Criteria," continue to apply to operating license applicants or holders whose construction permit was issued before January 10, 1997.

Comment 2: The word “seal” from Regulatory Guide 1.29 has been changed to “sealed” systems in the draft in Section C.1.h. This leaves a misunderstanding that “sealed” systems are the subject when “seal” or “sealing” water systems are the correct subject. It is recommended that the original wording of Regulatory Guide 1.29 be used, or if a wording change is desired, the word “sealing” be used.

> **Agreed:** The NRC staff has changed “sealed” to “seal” in Regulatory Position 1.h, as it appears in Section C of Regulatory Guide 1.29, Revision 4.

Comment 3: Section C.1.p refers to Regulatory Guides 1.3 and 1.4. For new plants, these regulatory guides are superseded by Regulatory Guide 1.183. The discussion should be updated to address the new plants as well as existing ones.

> **Agreed, in part:** Revision 2 of Regulatory Guides 1.3, “Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Boiling Water Reactors,” and 1.4, “Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Pressurized Water Reactors,” was ***not*** superseded, and the references to those guides remain valid, as used in Regulatory Position 1.p. However, the staff has revised that regulatory position to include an alternative reference to the latest edition of Regulatory Guide 1.183, “Alternative Radiological Source Terms for Evaluating Design-Basis Accidents at Nuclear Power Reactors.”

Comment 4: Regulatory Position C.1.e appears to have a textual editing problem with the fonts for “but not” in the second line.

> **Agreed:** The spacing of the text in question was distorted by the conversion to Adobe Portable Document Format as a prerequisite for posting the draft guide to the NRC’s Agencywide Documents Access and Management System (ADAMS), as well as to the agency’s public Web site. The staff has corrected the spacing in Revision 4 of Regulatory Guide 1.29, “Seismic Design Classification.”