

PUBLIC SUBMISSION

As of: 11/13/15 5:10 PM
Received: November 10, 2015
Status: Pending_Post
Tracking No. 1jz-8m6d-l3ez
Comments Due: November 16, 2015
Submission Type: Web

Docket: NRC-2015-0220
Seismic Design Classification for Nuclear Power Plants

Comment On: NRC-2015-0220-0001
Seismic Design Classification for Nuclear Power Plants

Document: NRC-2015-0220-DRAFT-0003
Comment on FR Doc # 2015-23365

9/17/2015
20 FR 55878
②

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RECEIVED
2015 NOV 13 PM 5:11
RULES AND REGULATIONS
GENERAL INVESTIGATIVE
DIVISION

General Comment

See attached comments.

Attachments

GEH Comments on DG-1315

SUNSI Review Complete
Template = ADM - 013
E-RIDS= ADM-03
Add= X. Law (YKLT)
E. O'Donnell (EXO)

GEH Comments on DG-1315
November 10, 2015

DG-1315, Paragraph C.1.h, refers to RG 1.97 for "specific criteria for instruments which need to be seismically qualified", and also refers to "Accident monitoring instrumentation Category 1". Information of this type was provided in Revision 3 of RG 1.97. However, the current revision of RG 1.97 that is referenced by DG-1315 (RG 1.97, Revision 4 (06/2005), is not explicitly referenced, but the title of RG 1.97 was changed from Revision 3 to Revision 4 and the Revision 4 title is listed in Reference 5 of DG-1315) does not mention the term "Category 1," nor does it directly provide specific criteria. These details appear in IEEE-497-2002, which is referenced by RG 1.97, Revision 4.

Note the following excerpt from the "Discussion" section of RG 1.97, Revision 4, which makes the point above.

"Given its prescriptive nature, Revision 3 of Regulatory Guide 1.97 quickly became the de facto standard for accident monitoring, and both ANSI/ANS-4.5-1980 and IEEE Std. 497-1981 fell out of use and were subsequently withdrawn as active standards. Nonetheless, Revision 3 of Regulatory Guide 1.97 has become outdated, in that it does not provide criteria for advanced instrumentation system designs based on modern digital technology. Revision 3 also does not address the need for technology-neutral guidance for licensing new plants. In addition, the guidance should be less prescriptive and based on the accident management functions of the individual variable types.

With the increased use of digital instrumentation systems in advanced nuclear power plant designs, the nuclear industry came to recognize a need to develop a consolidated standard that was more flexible than Revision 3 of Regulatory Guide 1.97. Instead of prescribing the instrument variables to be monitored (as was the case in Revision 3), the industry recognized the advantage of providing performance-based criteria for use in selecting variables. Similarly, rather than providing design and qualification criteria for each variable category, the industry sought to standardize the criteria based on the accident management functions of the given type of variable. These efforts resulted in the development of IEEE Std. 497-2002, "IEEE Standard Criteria for Accident Monitoring Instrumentation for Nuclear Power Generating Stations," by the IEEE Power Engineering Society, Nuclear Power Engineering Committee, Subcommittee 6, Working Group 6.1, 'Post-Accident Monitoring.'

Section C "Regulatory Position" RG 1.97, Revision 4, states:

"This regulatory guide endorses IEEE Std. 497-2002, "IEEE Standard Criteria for Accident Monitoring Instrumentation for Nuclear Power Generating Stations," as an acceptable method for providing instrumentation to monitor variables for accident conditions, subject to the following regulatory positions:...[regulatory clarifications on the application of IEEE 497]."