

Response to Public Comments on Draft Regulatory Guide (DG)-1328 Seismic Qualification of Electrical and Active Mechanical Equipment and Functional Qualification of Active Mechanical Equipment for Nuclear Power Plants Proposed Revision 4 of Regulatory Guide (RG) 1.100

On February 29, 2019, the NRC published a notice in the *Federal Register* (84 FR 6444) that Draft Regulatory Guide, DG-1328 (Proposed Revision 4 of RG 1.100), was available for public comment. The Public Comment period ended on April 29, 2019. The NRC received comments from the organizations listed below. The NRC has combined the comments and NRC staff responses in the following table.

Comments were received from the following:

Gregory Norris
On behalf of Entergy Corp.
ADAMS Accession No. ML19116A074

E. K. Henderson
Director, Nuclear Regulatory Affairs
Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402
ADAMS Accession No. ML19116A361

| Commenter | Section of DG-1328 | Specific Comments | NRC Resolution |
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| Gregory Norris | Section 1.2.1 | Section 1.2.1 on Page 13 states the following: "ASME QME-1-2017 is, in general, acceptable to the NRC staff for the seismic qualification of (1) electrical equipment in new NPPs and (2) new or replacement electrical equipment..." The two instances of the words "electrical equipment" should be "active mechanical equipment". | The staff agrees with the comment. The statement in the DG is erroneous. ASME QME-1 covers the functional and seismic qualification of active mechanical equipment. The RG was revised to address the comment. |
| Gregory Norris | Section 2.1.1.d | Section 2.1.1.d on Page 18 states the following: "since the original development of ASME QME-1 in the 1980s." The first issuance of QME-1 was in 1994. The statement needs to be changed to "in the 1990s." | The staff agrees with the comment. The statement in the DG is erroneous. ASME QME-1 was originally issued in the 1990s. The RG was revised to address the comment. |

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| Gregory Norris | References | The title for Reference 5 on Page 22 is incorrect. It should be: "Seismic Qualification of Electrical and Active Mechanical Equipment and Functional Qualification of Active Mechanical Equipment for Nuclear Power Plants" | The staff agrees with the comment. The title of the reference was incorrectly transcribed. The RG was revised to address the comment. |
| Gregory Norris | References | The title for Reference 11 on Page 22 is incorrect. It should be: "Seismic Qualification of Electric Equipment for Nuclear Power Plants" | The staff agrees with the comment. The title of the reference was incorrectly transcribed. The RG was revised to address the comment. |
| Gregory Norris | References | The title for Reference 12 on Page 22 is incorrect. "Practice" should be plural (i.e., Practices). | The staff agrees with the comment. The title of the reference was incorrectly transcribed. The RG was revised to address the comment. |
| Gregory Norris | | The new document describes changes to the seismic process since the program was last updated. In several sections they discuss High frequency seismic response above 33 HZ, in particularly at East coast Hard rock sites, on relays etc. They do not reference or credit any work done by EPRI for the Beyond Design Basis analysis that showed the previously tested relays are acceptable. Reference EPRI Report 3002004396 "High Frequency Program Application Guidance for Functional Confirmation and Fragility Evaluation" Final Report, July 2015. | The staff disagrees with adding the reference. The RG reflects current acceptable practices for seismic qualification of components in licensing. The EPRI report is not an NRC approved methodology for design basis uses and providing such a reference could prove confusing to the end user. The RG provides provisions for alternative methods, such as EPRI Report 3002004396, to be proposed and submitted for use in specific cases. The RG was not revised to address the comment. |
| Gregory Norris | Section D | <p>In Section D, Implementation - Use by NRC Staff, on page 20 21, it states:</p> <p>If an existing licensee voluntarily seeks a license amendment or change and (1) the NRC staffs consideration of the request involves a regulatory issue directly relevant to this new or revised regulatory guide and (2) the specific subject matter of this regulatory guide</p> | <p>Agree with the comment.</p> <p>The NRC revised the entire Section on Implementation.</p> |

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| | | <p>is an essential consideration in the staffs determination of the acceptability of the licensees request, then the staff may request that the licensee either follow the guidance in this regulatory guide or provide an equivalent alternative process that demonstrates compliance with the underlying NRC regulatory requirements. This is not considered backfitting as defined in 10 CFR 50.109(a)(1) or a violation of any of the issue finality provisions in 10 CFR Part 52.</p> <p>While the revised guidance is noted as voluntary, this statement indicates that the NRC could apply this guidance to new license amendments. The implication is that for any change to a plant that requires prior approval and involves seismic qualification, use of the later standard is required and it is not a backfit. Clarification of this statement is recommended.</p> | |
| E. K. Henderson | Section 1.2.1 | <p>The first sentence in section 1.2.1 should be changed to replace "electrical" with "mechanical" in two locations, as indicated below.</p> <p>ASME QME-1-2017 is, in general, acceptable to the NRC staff for the seismic qualification of (1) electrical mechanical equipment in new NPPs and (2) new or replacement electrical mechanical equipment in operating NPPs, subject to the provisions found below.</p> | The staff agrees with the comment. The statement in the DG is erroneous. ASME QME-1 covers the functional and seismic qualification of active mechanical equipment. The RG was revised to address the comment. |