

# PUBLIC SUBMISSION

<b>As of:</b> 10/30/15 4:07 PM
<b>Received:</b> October 26, 2015
<b>Status:</b> Pending_Post
<b>Tracking No.</b> 1jz-8lwj-u6vs
<b>Comments Due:</b> October 26, 2015
<b>Submission Type:</b> Web

**Docket:** NRC-2015-0198

Design of Structures, Components, Equipment, and Systems, and Reactor Coolant System and Connected Systems

**Comment On:** NRC-2015-0198-0001

Design of Structures, Components, Equipment, and Systems, and Reactor Coolant System and Connected Systems; Request for Comment

**Document:** NRC-2015-0198-DRAFT-0002

Comment on FR Doc # 2015-21074

## Submitter Information

*8/23/2015*

*80 FR 51614*

**Name:** Robert Theuret

**Submitter's Representative:** Westinghouse Electric Company

**Organization:** Westinghouse Electric Company

## General Comment

*2*

Please see attached file.

## Attachments

LTR-NRC-15-75

RECEIVED

2015 OCT 30 PM 4:12

RULES AND DIRECTIVES  
EPA/DOH  
EPA/DOH  
EPA/DOH

SUNSI Review Complete

Template = ADM - 013

E-RIDS= ADM-03

Add=*m. rish (m d n)*

*M. Decker (NSD 1)*



Westinghouse Electric Company  
1000 Westinghouse Drive  
Cranberry Township, Pennsylvania 16066  
USA

Cindy Bladey, Branch Chief  
Rules, Announcements, and  
Directives Branch (RADB)  
Office of Administration  
Mail Stop: O12-H08  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Direct tel: (412) 374-4643  
Direct fax: (724) 940-8560  
e-mail: greshaja@westinghouse.com

LTR-NRC-15-75  
October 23, 2015

Subject: **Transmittal of Westinghouse Electric Company Comments on NUREG-0800 Standard Review Plan Section 3.10 Draft Revision 4 "Seismic and Dynamic Qualification of Mechanical and Electrical Equipment" [Docket ID NRC-2015-0198]**

Dear Ms. Bladey,

Thank you for the opportunity to provide comments on the draft Revision 4 of NUREG-0800 Standard Review Plan (SRP) Section 3.10 entitled "Seismic and Dynamic Qualification of Mechanical and Electrical Equipment"

Please find enclosed the Westinghouse Electric Company (Westinghouse) comments on the draft Revision 4 of NUREG-0800 SRP Section 3.10.

For technical questions regarding the enclosed comments, please contact James Parello at (704) 697-6452.

A handwritten signature in cursive script that reads "John T. Crane for".

James A. Gresham, Manager  
Regulatory Compliance

Attachment

**Westinghouse Comments on NUREG-0800 SRP Section 3.10 Draft Revision 4**

1. Document Location: Pg. 3.10-1 / Section I / 1. "Qualification Criteria"

Editorial Comment

It is not necessary to start the first sentence "Qualification criteria are..." since the subsection title is "Qualification Criteria" and these words are used later in the first sentence as "criteria for qualification"..

Recommended Change

Remove the redundant use of the words "qualification criteria" by starting the first sentence with: "The criteria for qualification..."

2. Document Location: Pg. 3.10-2 / Section I / 2. "Structural Integrity and Functionality of Mechanical and Electrical Equipment"

Editorial Comment

Safe shutdown and operating basis earthquakes are used in this document as compound words within this document but in IEEE Std 344, other industry/regulatory documents, and NRC Definitions document they are not specified as compound words.

Recommended Change

- Spelling change:       a.) "safe-shutdown" to "safe shutdown" and  
                              b.) "operating-basis" to "operating basis".

3. Document Location: Pg. 3.10-4 / Section II / Requirements / 3.

Technical Comment

It is unclear why this subsection of SRP 3.10 is crossing over into SRP 3.11. This SRP as it relates to GDC 4 should be focused on dynamic qualification activities. SRP 3.11 is used to address environmental conditions and environmental qualification.

Recommended Change

Clarify wording to address significant dynamic effects as identified in GDC 4.

4. Document Location: Pg. 3.10-6 / Section II / SRP Acceptance Criteria / 1.

Technical Comment

Reference is made in this subsection to IEEE Std. 344-2004 and ASME QME-2007 and in other subsections. These industry documents may be the latest revisions accepted by the NRC for implementation but they are not the required design basis for all nuclear plants.

Recommended Change

Additional wording is needed to direct the reader to the design basis of the plant (e.g. Plant Final Safety Analysis Report (FSAR)) for specific applicable regulatory and industry requirements.

5. Document Location: Pg. 3.10-8 / Section II / SRP Acceptance Criteria / 1.A.xiii

Technical Comment

It is unclear why was IEEE Std 344-1987 deleted as a source for damping values? RG 1.61 defines the damping values for equipment to be seismically qualified by analysis. The damping values found in RG 1.61 are not applicable to seismic qualification by test. IEEE Std 344-1987 defines the recommended damping value for seismic testing.

Recommended Change

IEEE Std 344-1987 should not be deleted as a source for damping. If the intent is to make the wording for qualification by analysis then the following wording should be considered: "Selection of damping values for equipment to be seismically qualified by analysis should be made in accordance with RG 1.61,"Damping Values for Seismic Design of Nuclear Power Plants."

6. Document Location: Pg. 3.10-10 / Section II / SRP Acceptance Criteria / 1.B.iii

Technical Comment

Equipment may not be tested with the supports installed or with a dummy mass simulation due to shake table limitations. When test alone is not possible then the equipment qualification is based on test and analysis. In this case the support structure is seismically analyzed to demonstrate acceptance.

Recommended Change

Wording should be revised to allow the equipment and its supports to be qualified by testing and analysis.

7. Document Location: Pg. 3.10-10 / Section II / SRP Acceptance Criteria / 1.B.iii / 2<sup>nd</sup> Sentence

Editorial Comment

Subsection "I.1.A.iii" should be "II.1.A.iii".

Recommended Change

Change: Subsection "I.1.A.iii" to "II.1.A.iii".

8. Document Location: Pg. 3.10-13 / Section II / SRP Acceptance Criteria / 6.C.iv.

Editorial Comment

Subsection "item II.6.A.ii" should be "Subsection II.6.A.ii".

Recommended Change

Change: "item" to Subsection".

9. Document Location: Pg. 3.10-14 / Section II / Technical Rationale / 2. / 1st Paragraph

Technical Comment

The wording changed from "designed to withstand the effects of expected natural phenomena" to "designed to withstand the effects of natural phenomena"? The word "expected" was deleted which removes a connection to the plant design basis. Structures, Systems, and Components

(SSCs) are designed to withstand the effects of design basis natural phenomena as defined in plant design basis documentation

Recommended Change

Change back to the original wording or change to “designed to withstand the effects of design basis natural phenomena”.

10. Document Location: Pg. 3.10-16 / Section II / Technical Rational / 6. / 2<sup>nd</sup> Paragraph.

Editorial Comment

a.) Subsection “I.1” should be “II.1”

b.) “Subsection I.3” should be “II.3”

Recommended Change

Change: a.) Subsection “I.1” to “II.1”

b.) “Subsection I.3” to “II.3”

11. Document Location: Pg. 3.10-18 / Section III / 2.E

Editorial Comment

Reference should be References 12 and 13 for evaluation of functional assurance programs. Presently References 10 and 11 are defined.

Recommended Change

Change: “References 10 and 11” to “Reference 12 and 13”.

12. Document Location: Pg. 3.10-18 / Section III / 2.F

Editorial Comment

Subsection “II.2.E” should be “III.2.E”.

Recommended Change

Change: Subsection “II.2.E” to “III.2.E”.