

SeabrookLANPEm Resource

From: Poole, Justin
Sent: Tuesday, August 22, 2017 4:22 PM
To: 'Deborah Grinnell'
Subject: RE: Re: NextEra meeting with NRC
Attachments: 2017-8-24 Seabrook LAR Stage 3 Public Meeting - FINAL.PDF

Debbie,

Here are the staff's slides that we'll present at the public meeting and below is the conference line information. The meeting focus is on their stage 3 building evaluations.

Participant passcode: 46681#
Toll Free Number: 1-888-790-7136

Justin C. Poole
Project Manager
NRR/DORL/LPL I
U.S. Nuclear Regulatory Commission
(301)415-2048

-----Original Message-----

From: Deborah Grinnell [mailto:grinnelldebbie2@gmail.com]
Sent: Tuesday, August 22, 2017 4:18 PM
To: Poole, Justin <Justin.Poole@nrc.gov>
Subject: [External_Sender] Re: NextEra meeting with NRC

Justin,

What is the content of your meetin with NextEra g..the outline of your questions.

Thank you,

Debbie

> On Aug 22, 2017, at 4:12 PM, Deborah Grinnell <grinnelldebbie2@gmail.com> wrote:

>

> Hello Justin

>

> I will listen, follow, and may speak with C-10 on the Aug 24th 2017 meeting you will have with NextEra on August 24 at 1-3PM.

>

> Debbe Grinnell

Hearing Identifier: Seabrook_LA_NonPublic
Email Number: 1117

Mail Envelope Properties (31be334fd633433eb89aa50f9181c219)

Subject: RE: Re: NextEra meeting with NRC
Sent Date: 8/22/2017 4:21:48 PM
Received Date: 8/22/2017 4:21:40 PM
From: Poole, Justin

Created By: Justin.Poole@nrc.gov

Recipients:
"Deborah Grinnell" <grinnelldebbie2@gmail.com>
Tracking Status: None

Post Office: HQPWMSMRS01.nrc.gov

Files	Size	Date & Time
MESSAGE	973	8/22/2017 4:21:40 PM
2017-8-24 Seabrook LAR Stage 3 Public Meeting - FINAL.PDF		1591357

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Seabrook Station

License Amendment Request

“Stage 3” Methodology

Justin Poole, Project Manager, DORL, NRR

Bryce Lehman, Structural Engineer, DE, NRR

George Thomas, Senior Structural Engineer, DE, NRR

Agenda

- Issues with Current Stage 3 Methodology
- Staff Expectations for Methodology
- Path Forward
- Schedule Discussion

Stage 3 as Described in LAR

- Description in LAR of advanced techniques proposed to be used is high-level with no implementation details provided for staff to evaluate as a generic method of evaluation
- Includes methods whose implementation appear open to interpretation, with no specific applicability limitations, justification or acceptance criteria, and may be outside the design code (ACI 318-71)
- LAR notes that analysis will demonstrate compliance with ACI 318-71

Staff Concerns with Stage 3

- It is unclear how the methodology as described in the LAR could be consistently applied and similar results obtained
 - Significant decisions in the Containment Enclosure Building (CEB) calculation appear to be based on engineering judgement
 - Stage 3 uses iterative processes with no clear limitations

Staff Concerns with Stage 3

- Review of Containment Enclosure Building (CEB) calculation identified several general issues:
 - ACI 318-71 requirements for moment redistribution do not appear to be met or justified; approach used does not appear to be supported by accepted concrete codes
 - Acceptance criteria are not provided for the structural adequacy of sections to develop a plastic hinge
 - A limit on moment redistribution iterations is not provided
 - No guidance is provided on determining the threshold factor or under what circumstances it can be modified
 - No evaluation of serviceability limit state included under normal service load conditions that include ASR

Staff Expectations for Methodology

- The LAR or UFSAR mark-up should include sufficient detail to allow qualified engineer to follow the process through any Stage 3 calc
 - How ACI 318-71 requirements will be met and/or justification for alternatives and requirements that are not met
 - Guidance/criteria on when proposed analysis techniques and methods can be used
 - Limits on the use of iterative processes
 - Identified rebar strain limits under normal service conditions including ASR load

Path Forward:

Potential LAR Supplement

- Potential LAR supplement options:
 - Update LAR to include detailed, consistently applicable methodology; staff will review a sample of completed calculations
 - Approval of partial methodology (Stage 1 & 2); all final Stage 3 evaluations for NRC review and approval
 - Other options?
- Approach is up to NextEra

Impacts on Schedule

- Staff intends to review a sampling of completed Stage 1, 2 and 3 analyses
 - Sampling dependent on analysis complexity and issues identified
- Schedule dependent on analyses availability
 - Analyses should be approved and incorporated by NextEra prior to NRC review

Questions?