



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 11, 2021

MEMORANDUM TO: Jeanne Johnston, Chief  
Long Term Operations and Modernization Branch  
Division of Engineering and External Hazards  
Office of Nuclear Reactor Regulation

FROM: Tekia V. Govan, Project Manager **/RA/**  
Reactor Assessment Branch  
Division of Reactor Oversight  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE PUBLIC MEETINGS TO DISCUSS THE  
NUCLEAR ENERGY INSTITUTE'S PRE-SUBMITTAL OF NEI 20-07,  
DRAFT B, HELD ON APRIL 7, APRIL 14, AND APRIL 21, 2021

In April 2021, the U.S. Nuclear Regulatory Commission (NRC) staff held three weekly meetings on April 7, April 14, and April 21, 2021 with the Nuclear Energy Institute (NEI) to discuss pre-submittal activities for NEI 20-07, Draft B, "Guidance for Addressing Software Common Cause Failure in High Safety-Significant Safety-Related Digital I&C Systems" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20245E561). NEI has requested staff engagement on this guidance document prior to submitting a request for formal NRC endorsement.

Prior to these meetings, the NRC staff provided NEI with a high-level set of comments (ADAMS Accession No. ML21025A392) and a detailed set comments (ADAMS Accession No. ML21050A090) on NEI 20-07, Draft B. The staff provided these comments with the note that the comments should not be considered all-inclusive and that the staff may provide additional comments as a result of NEI's responses. The scope of these April 2021 meetings focused only on NRC's high-level comments.

As a result of the NRC staff's high-level comments, NEI provided written responses to discuss at the April 2021 meetings (ADAMS Accession No. ML21089A062). The staff reviewed NEI responses in preparation for these meetings.

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## Meeting Summary

### April 7, 2021

NEI began the meeting with an overview of NEI 20-07, Draft B (ADAMS Accession No. ML21092A175). This presentation focused on the approach documented within NEI 20-07 and NEI's proposed schedule leading to the formal submittal to the NRC requesting endorsement. This was followed by an Electric Power Research Institute (EPRI) presentation on their Integrated Digital Systems Engineering Framework (ADAMS Accession No. ML21095A177).

After these presentations, the staff moved into pre-selected comments for discussion. The staff's detailed notes regarding the discussion of these comments are captured under ADAMS Accession No. ML21103A447.

### April 14, 2021

This meeting was a continuation of the April 7, 2021 meeting. The staff continued the discussion of their comments with NEI. The staff's detailed notes regarding the discussion of these comments are captured under ADAMS Accession No. ML21109A365.

### April 21, 2021

NEI began this meeting with a table that they developed to compare NEI 20-07 safe design objectives (SDO) with current NRC regulatory guidance and Institute of Electrical and Electronics Engineers standards (ADAMS Accession No. ML21110A066).

The staff's detailed notes capture the SDO discussion as well as the remaining comments that were discussed with NEI (ADAMS Accession No. ML21113A198).

As this meeting concludes the April weekly meetings on NEI 20-07, the staff's detailed notes remain in draft as it is expected that the April 21, 2021 notes will continue to be edited by the staff after NEI submits the next revision to draft NEI 20-07.

### Next Steps/Action Item

The staff discussed the following next steps with meeting participants:

- Based on the high-level comments provided by the NRC staff to date, NEI will begin revisions to develop NEI 20-07, Draft C. The staff expects to receive Draft C in May 2021.
- The next public meeting will be used to discuss NEI 20-07, Revision C and next steps in the pre-submittal review.
- **Action** – After some internal discussion, NEI communicate to NRC management, via email, their recommended approach for addressing the policy concerns regarding diversity and defensive measures in NEI 20-07.

After the meeting NEI indicated that NEI 20-07, Draft C would have highlights indicating proposed changes to address diversity. The actual changes will be provided in a later revision.

## **Conclusion**

At the end of the meeting, NRC and industry management gave closing remarks. NEI and other nuclear industry representatives expressed appreciation for the open dialogue.

The enclosure provides the attendance list for this meeting.

Over the course of the April 2021 public meetings, staff emphasized some of the following high-level concerns regarding NEI 20-07 that will receive significant focus moving forward:

1. Policy concerns – Staff emphasized that NEI 20-07 compatibility with both the policy, as written, as well as the technical basis that undergirds the policy is an essential focus going forward. Staff also stated that policy inconsistencies may result in staff approaching the Commission to revisit the policy, which could significantly extend the review timeframe.
2. Usage of ERPI research – Overall, staff expressed concerns with how cited EPRI research was used to support the technical conclusions in NEI 20-07.
3. Technical basis of NEI 20-07 – Staff stated that the technical basis described in NEI 20-07 would need further enhancements to facilitate staff's understanding and continued review.
4. NEI 20-07 versus currently endorsed Appendix B processes – Staff seeks to clarify similarities and differences between the two process to better facilitate its review.

Enclosure:  
As stated

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**ADAMS Accession No.:** ML21131A229

\*via e-mail

<b>OFFICE</b>	NRR/DRO/IRSB/PM	NRR/DEX/ELTB/TR	NRR/DEX/ELTB	NRR/DRO/IRSB/PM
<b>NAME</b>	TGovan*	WMorton*	JJohnston*	TGovan*
<b>DATE</b>	05/07/2021	05/11/2021	05/11/2021	05/11/2021

**OFFICIAL RECORD COPY**

## LIST OF ATTENDEES

PUBLIC MEETING TO DISCUSS THE NUCLEAR ENERGY INSTITUTE'S PRE-SUBMITTAL  
OF NEI 20-07, DRAFT B

April 7, 14 and 21, 2021 12:30 PM to 4:30 PM

### Webinar

#### ATTENDEE

#### ORGANIZATION

1. Eric Benner	NRC
2. Wendell Morton	NRC
3. Tekia Govan	NRC
4. Maxine Segarnick	NRC
5. Jonathan Roley	NRC
6. Bob Weisman	NRC
7. Rossnyev Alvarado	NRC
8. David Rahn	NRC
9. Sergui Basturescu	Unknown
10. Sheldon Clark	NRC
11. Eric Bowman	NRC
12. Ismael Garcia	NRC
13. Norbert Carte	NRC
14. Paul Rebstock	NRC
15. Steve Vaughn	NEI
16. Jana Bergman	Curtiss-Wright
17. Neil Archambo	Duke Energy
18. Steve Geier	NEI
19. Warren Odess-Gillett	Westinghouse/NEI
20. Tom Basso	NEI
21. Mike Wiwel	PSEG Nuclear LLC
22. John Connelly	Exelon
23. Bernie Dittman	NRC
24. David Herrell	MPR
25. Ty Rogers	GE Hitachi Nuclear Energy
26. David Jarosh	Unknown
27. Marty Flynn	Entergy
28. Robert Armistead	Member of the Public
29. Richard Stattel	NRC
30. Sushil Birla	NRC
31. Richard Supler	Enercon
32. William Roggenbrodt	NRC
33. Eugene Keller	NRC
34. Mike Bailey	MEPPI
35. Frances Pimental	NEI

Enclosure