



UNITED STATES
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MEMORANDUM TO: Dennis C. Morey, Chief
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SUBJECT: SUMMARY OF SEPTEMBER 7, 2017, MEETING TO DISCUSS STAFF
COMMENTS ON NEI 16-16 [DRAFT 2]

On September 7, 2017, U.S. Nuclear Regulatory Commission (NRC) staff met with representatives from the Nuclear Energy Institute (NEI). The purpose of the meeting was to discuss staff comments on NEI 16-16 [Draft 2], "Guidance for Addressing Digital Common Cause Failure." All information related to the meeting and discussed in this summary can be found in the Agencywide Documents Access and Management System (ADAMS) package accession number ML17234A026.

The NRC staff opened the meeting with a bifurcated presentation which initially covered the meeting agenda and objectives. A copy of the NRC staff presentation can be found in the referenced ADAMS package.

NRC staff stated in its opening remarks that the goal for the meeting was to identify areas of alignment and non-alignment on NEI 16-16 with a clean understanding of what was needed for endorsement consideration. It was agreed that the definition of common cause failure (CCF) was a key driver. The NRC staff explained that the definition of CCF could be a policy issue that needed to be provided to the Commission for a decision.

The NEI presentation started with a discussion of how residual uncertainty in CCF was reduced by the application of preventive measures. A discussion followed on the definition of CCF in NEI 16-16, and NEI took an action to identify a clearer definition. NEI explained that there were a number of CCF definitions in several different places. NEI also explained that the definition in NEI 16-16 was aligned with what licensees were using, and that NEI 16-16 with a clear CCF definition would give direction to designers. A second action was for NEI to look at CCF definitions used in probabilistic risk assessments and other sources identified by the NRC staff.

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During the discussions on the NEI presentation, a number of actions were identified. These included NEI:

- 1) looking at other terms to replace “non-credible” such as “sufficiently low”;
- 2) clarifying the difference between the Final Safety Analysis Report and safety analyses;
- 3) considering adding more information about preventive measures in NEI 16-16;
- 4) revising the diagram on residual uncertainty in NEI 01-01, “Guideline on Licensing Digital Upgrades: EPRI [Electric Power Research Institute] TR [Technical Report] -102348, Revision 1, NEI 01-01: A Revision of EPRI TR-102348 to Reflect Changes to the 10 CFR 50.59 [Code of Federal Regulations, Title 10, Section 50.59], ‘Changes, tests and experiments’ Rule,” (ADAMS Accession No. ML020860169) before including it in NEI 16-16;
- 5) determining if an example of using NEI 16-16 for license amendments should be included in NEI 16-16; and
- 6) submitting NEI 16-16 [Draft 3] and addressing the open items from NEI 16-16 [Draft 2].

Following the NEI presentation, the NRC staff finished its presentation by discussing the schedule for work on NEI 16-16. During the discussions on the NRC staff schedule, a question was raised on one milestone related to NRC staff providing NEI with an initial perspective on whether NEI 16-16 could be endorsed. The NRC staff stated that it was not clear what NEI meant by an initial perspective on NEI 16-16 endorsement. NEI took an action to better clarify what its expectations were for an initial perspective on NEI 16-16 endorsement.

Another area related to the endorsement question was whether NEI would look for the NRC staff position on NEI 16-16 [Draft 3] or if more drafts would be submitted. NEI agreed to inform the staff which draft would be applicable for the March 2018 milestone related to the NRC staff initial perspective on whether NEI 16-16 could be endorsed. NEI questioned if the NRC staff was done with its review of NEI 16-16. The NRC staff responded that it was not done.

NRC staff asked if NEI was looking for more comments on NEI 16-16 [Draft 2]. NEI said that it did not want more comments on NEI 16-16 [Draft 2] but that any additional concerns related to Appendix A would be appreciated before work begins on NEI 16-16 [Draft 3]. It was noted that in order to complete the review process, it was important to get the fundamental issues, such as the definition of CCF resolved.

NRC staff stated that by having the fundamentals resolved the rest of the NRC staff comments would be in better context. The NRC staff noted that once the fundamentals were resolved its current comments might change or could even be removed and that the NRC staff may have comments on NEI 16-16 [Draft 3] after it is submitted.

During these discussion on the NRC staff presentation NEI requested more information on the regulatory basis for some of the NRC staff positions. The NRC staff agreed to take an action to identify the regulatory bases supporting some of the NRC staff positions.

The final area of discussion on the NRC staff schedule was an NEI action to provide feedback on the schedule.

At the end of the meeting, it was agreed that closing the fundamental issues, such as the definition of CCF, was needed before NEI could respond to all the NRC staff comments. To help close the fundamental issues, an action to schedule another interaction was taken by both the NRC staff and NEI.

The consensus was that the interaction could be a call or a meeting. In either case, it was recognized that the interaction would be publically noticed. Also, it was agreed that a routine biweekly call could be an effective means of resolving issues. The NRC staff emphasized that if the biweekly calls dealt with technical details and exchanges on regulatory matters, the calls would have to be publically noticed.

The following are the NEI actions from the meeting:

- 1) clarify the definition of CCF;
- 2) look at the CCF definition used in probabilistic risk assessments and other definitions suggested by the NRC staff;
- 3) identify other terms to replace "non-credible" such as "sufficiently low";
- 4) clarify the difference between the Final Safety Analysis Report and safety analyses;
- 5) consider adding more information about preventive measures in NEI 16-16;
- 6) revise the diagram on residual uncertainty in NEI 01-01 before including it in NEI 16-16;
- 7) determine if an example of using NEI 16-16 for license amendments should be included in NEI 16-16;
- 8) submit NEI 16-16 [Draft 3] and address the open items from NEI 16-16 [Draft2]; and
- 9) clarify the NEI expectations of what is meant by an initial perspective on whether NEI 16-16 could be endorsed.

Other actions from the meeting included:

- 10) NRC staff and NEI will schedule a second interaction;
- 11) NRC staff and NEI will investigate the use of biweekly interactions; and
- 12) NRC staff will provide additional information on the regulatory basis for its positions.

Docket No.: 99902028

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