



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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May 24, 2017

MEMORANDUM TO: Kevin Hsueh, Chief
Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph J. Holonich, Senior Project Manager /RA/
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SUBJECT: SUMMARY OF MARCH 29, 2017, MEETING TO DISCUSS
COMMON CAUSE FAILURE

On March 29, 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 NEI 16-16 [Draft 1], "Guidance for Addressing Digital Common Cause Failure," (Agencywide Documents Access and Management System (ADAMS) Accession No.: ML17033B139). All information related to the meeting and discussed in this summary can be found in the package ADAMS Accession No. ML17073A002.

Before the detailed discussions on the NRC staff comments, NEI stated that it wanted a full characterization of the NRC staff comments on NEI 16-16. By having those, NEI said that it can provide the next draft by the end of April 2017. It continued that this meeting was critical in understanding the NRC staff comments, a copy of which is found in the referenced meeting package. NEI concluded its remarks by stating that a large amount of resources is being applied to the development of NEI 16-16 and that alignment with the staff was needed.

In the main part of the meeting, NRC staff and NEI discussed the NRC staff comments and where needed the NRC staff provided clarifications. During these discussions, a number of actions were identified as part of the clarifications. These actions are listed at the end of this summary.

NRC staff and NEI also focused on the next meeting on NEI 16-16 to be held on April 11, 2017. It was agreed that this meeting would focus on how content from Appendix A of the Electric Power Research Institute (EPRI) report "EPRI- Methods for Assuring Safety and Dependability when Applying Digital Instrumentation and Control Systems" will be used in conjunction with the main body of NEI 16-16. The report is available through the EPRI web site.

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The NRC staff noted that it had purchased the EPRI report as a reference but that it was not submitted for formal review by EPRI. NEI stated that Appendix A of the EPRI report would become Appendix A of NEI 16-16 and will be included in the draft 2 submission. NEI requested that the NRC staff begin reviewing, identifying, and communicating significant concerns with Appendix A of the EPRI report. The NRC staff agreed to do so. This is an action from the meeting.

Following the discussions and clarifications of the NRC staff comments, the NRC staff presented its draft schedule, which is in the presentation found in the ADAMS package. The NRC staff requested comments from stakeholders on the schedule presented at this meeting by March 31, 2017. This was an action.

During the stakeholder comment period, one stakeholder noted that there were multiple industry standards that had been issued over the years to prevent common cause failure (CCF). The stakeholder indicated that with these multiple documents available, it appeared there was sufficient guidance on CCF.

In closing, NEI stated that the meeting was productive and that it had received good feedback.

Actions from the meeting included:

- 1) For NRC comments on NEI 16-16 [Draft 1], NEI will:
 - a. Consider including risk insights or whether to seek staff endorsement through a two-phased review approach (Comment 3);
 - b. Clarify the methodology used to determine the likelihood of CCF (Comment 4);
 - c. Relook at using Digital Engineer in the guidance document (Comment 13);
 - d. Clarify how to use protective measures (Comment 19);
 - e. Look at the terms and basis for them (Comment 21);
 - f. Provide more detail on how to use the graded approach (Comment 22); and
 - g. Consider adding an example (Comment 23).
- 2) NEI will discuss the use of Appendix A of the EPRI document in NEI 16-16 at the April 11, 2017 meeting.
- 3) NRC staff will begin reading Appendix A of the EPRI report with the intent to identify and communicate any significant concerns.
- 4) NRC staff welcomes comments on the schedule in its presentation from NEI, industry representatives, and stakeholders by March 31, 2017.

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