October 11, 2017

MEMORANDUM TO: Dennis C. Morey, Chief
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SUBJECT: SUMMARY OF MEETINGS HELD AUGUST 1 AND 2, 2017, TO DISCUSS NEI 96-07, APPENDIX D AND REGULATORY INFORMATION SUMMARY RIS 2017-XX REGARDING DIGITAL INSTRUMENTATION AND CONTROL 10 CFR 50.59 GUIDANCE

On August 1 and 2, 2017, U.S. Nuclear Regulatory Commission (NRC) staff met with representatives from the Nuclear Energy Institute (NEI). The purpose of the meetings was to: 1) continue monthly discussions on draft NEI 96-07, Appendix D, "Supplemental Guidance for Application of 10 CFR 50.59 to Digital Modifications" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16126A197); and 2) interact on the NRC Regulatory Issue Summary (RIS) on the application of Title 10 of the *Code of Federal Regulations,* Section 50.59 (10 CFR 50.59). All information related to the meetings and discussed in this summary can be found in the ADAMS package accession numbers ML17114A020 and ML17209A355.

August 1, 2017 Public Meeting

NRC staff opened the August 1, 2017, meeting with an introductory presentation. During the presentation, NEI noted that the information in the NRC presentation was not consistent with the focus of NEI 16-16, [Draft 2], "Guidance for Addressing Digital Common Cause Failure." (ADAMS Accession No.: ML17135A253).

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NEI made two presentations at the meeting. One dealt with assessing the meaning of "a different result" used within 10 CFR 50.59(c)(2)(vi) (10 CFR 50.59, Criterion VI) and the other covered the mapping of NEI 96-07, Appendix D and NEI 16-16 [Draft 2]. During the presentations, NRC staff and NEI engaged in detailed discussions to help clarify information and align to a common understanding.

Discussion on "Different Results"

It was agreed at the August 1, 2017, meeting that the term "different results" is a generic 10 CFR 50.59 issue regarding the interpretation of Criterion VI guidance in NEI 96-07 Revision 1, "Guidelines for 10 CFR 50.59 Implementation," (ADAMS Accession No.: ML003686043), which serves as the primary guidance for the 10 CFR 50.59 review process. NEI stated that if a potential malfunction (e.g. a common cause failure (CCF)) cannot be eliminated by likelihood arguments, then when considering whether there is a different result, the result of the postulated malfunction should be evaluated in terms of its "plant-level effect." NRC staff understood this to be the NEI terminology for the effects of the results in the plant-level safety analyses. The term "plant-level result", as used in the current version of draft NEI 96-07, Appendix D is not specifically defined, nor are there specific acceptance criteria described to support what plant-level results could be used in terms of different-results comparison.

NEI opened its presentation on 10 CFR 50.59 by noting that the industry presentation was founded in the resolution of issues first raised in 1997. NEI also explained that when developing NEI 96-07, Appendix D it used the definitions from either the current regulation itself or guidance documents endorsed via regulatory guides. NEI's presentation walked through the application of 10 CFR 50.59(c)(2)(vi) as follows:

- First: The NEI presenter opened the discussion by examining the questions, 1) "Does/should UFSARs of varying degrees of detail affect the role/application of 10 CFR 50.59?", 2) "What is a "malfunction of an SSC important to safety"?", and 3) "Is the current UFSAR description the proper point for determining when prior NRC approval is required?"
- Next, the presenter provided a brief history of the evolution of the 10 CFR 50.59 rulemaking that occurred in the 1997-2000 time frame as well as the NEI and NRC documents (e.g., SECY papers) that were prepared during the time the rulemaking process was taking place. The definition of "facility" was created to include the concept of the design and performance requirements for SSCs. The concept of "Screening" was developed within NEI guidance as an examination of "change" as something affecting a design function. This was intended to diminish the importance of UFSAR level of detail, through the examination of how the proposed change could affect the design functions of the SSCs, regardless of what level of detail the SSCs are described within the UFSAR. Then the screening decision is based upon whether there are any "adverse effects" of a proposed change on any intended design functions. The NEI presenter asserted that the guidance calls for "Malfunctions" to be expressed at a higher functional level than within the SSC being modified.
- Next the presenter further discussed the 50.59 process as an evaluation of design basis functions, not design basis values. Regarding the treatment of "consequences," the current UFSAR value is not the limit to be judged against, but rather the SRP acceptance criteria is the appropriate benchmark. Malfunctions are to be assessed at the functional level of design functions that are credited in the safety analysis.
- The presenter stated that malfunctions of SSCs are generally postulated as potential single failures to evaluate plant performance with the focus being on the result of the malfunction rather than the cause or type of malfunction. A malfunction that involves

an initiator or failure whose effects are not bounded by those explicitly described in the UFSAR is considered to be a malfunction with a different result. In evaluating a proposed activity against this criterion, the types and results of failure modes of SSCs that have previously been evaluated in the UFSAR and that are affected by the proposed activity should be identified. This evaluation should be performed consistent with any failure modes and effects analysis (FMEA) described in the UFSAR, recognizing that certain proposed activities may require a new FMEA to be performed.

- The presenter stated that NEI 96-07 was not written to address concerns specific to DI&C, and software CCF is not part of the design basis. However, design output can include CCF considerations.
- The presenter stated that the pre-1999 version of 10 CFR 50.59 read in part: "…if a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created…" This was changed to include a stand-alone Criterion 6, which was "…Create a possibility for a malfunction of an SSC important to safety with a different result than any previously evaluated in the final safety analysis report (as updated)."
- The presenter pointed out that in the Notice of Proposed Rulemaking for the updated version of 10 CFR 50.59, it stated: "The Commission does not agree that the industry interpretation is consistent with the rule as written, which refers to creation or possibility of a malfunction of a different type, not of a different result. However, the Commission recognizes that in its reviews, equipment malfunctions are generally postulated as potential single failures to evaluate plant performance; thus, the focus of the NRC review was on the result, rather than the cause/type of malfunction. Unless the equipment would fail in a way not already evaluated in the safety analysis, there is no need for NRC review of the change that led to the new type of malfunction."
- Finally, the presenter outlined the position stated in the Statements of Consideration for the Final Rule updating 10 CFR 50.59 in 2001 regarding evaluation of the results of malfunctions. Such "determination should be made either at the component level, or consistent with the failure modes and effects analyses (FMEA), taking into account single failure assumptions, and the level of the change being made. Several commenters stated that this guidance should be revised to refer only to the failure modes and effects analysis in the FSAR, and not to specify the component level. The Commission agrees that this criterion should be considered with respect to the FMEA, but also notes that certain changes may require a new FMEA, which would then need to be evaluated as to whether the effects of the malfunctions are bounding." The NEI presenter stated that this is consistent with the functional level of Design Functions and Design Basis Functions being above the functional level of individual SSCs.

The NRC staff stated it understood NEI's presentation to mean that the use of the term "plant-level effects" could have the connotation that the results should be evaluated in terms of the 10 CFR Part 100, "Reactor Site Criteria," site-boundary dose limits or reactor fuel peak-cladding temperature limits. The NRC staff stated it disagrees with this meaning and stated its position regarding this issue has always been that the comparison of "different results" should be based on the impact of the result on the intended "design function" of the affected equipment as described in the FSAR, where "design function" is that term as defined in NEI 96-07, Revision 1. NEI clarified that it did not state that these limits are the source for a "different result" decision.

NRC staff posed two examples: the "design function" of diesel generators is to provide emergency power; and the "design function" of heating, ventilation, and air conditioning (HVAC) or cooling water system chillers is to provide chilled water for HVAC and plant equipment. In

the NRC staff understanding for these two examples, the "plant-level" effect or result of the postulated CCF of a digital controller for the diesel generator or chiller would be the unavailability of emergency electrical power or the lack of heat removal capability, respectively.

The result of the unavailability of emergency electrical power or loss of heat removal capability would then have to be evaluated in terms of the contribution of the "design function" to achieving the specific key safety functions that were evaluated in the safety analyses as described in the FSAR, as amended. If a safety function were to be adversely impacted by the "different result", the response to 10 CFR 50.59, Criterion VI would have to be "Yes." NEI did not express alignment with these statements as it was not clear that the NRC staff were strictly applying the NEI 96-07, Revision 1 definition of "design function." NEI did agree to consider an example to be prepared for a future meeting discussion.

In addition, NEI provided clarification regarding its position on failure modes and effects analyses (FMEA) as they apply to 10 CFR 50.59, Criterion VI. NEI's position was that FMEAs, such as for main control room safety chillers, would be considered part of the "descriptive information" about that SCC in a given plant FSAR, and would not represent analyses for which you would compare "different results". Further, NEI explained that the FMEA is used to connect the design and performance requirements for the SSCs described in the FSAR to the "design bases functions," i.e., functions performed by SSCs that are (1) required by, or otherwise necessary to comply with, regulations, license conditions, orders or technical specifications, or (2) credited in licensee safety analyses to meet NRC requirements. NEI stated that this followed the overall position that the only analyses that are decision points under 10 CFR 50.59, Criterion VI for comparison of different results are the plant's safety analyses.

The NRC staff did not agree with the NEI stated position in the meeting nor all of the various conceptual examples provided by industry stakeholders in the discussion. However, the NRC staff stated that, in its view, the two positions may be closer in alignment with respect to the importance of the postulated result on the intended design function under evaluation. Further, the NRC staff said that the perceived differences in understanding may remain because of the specific language/terminology NEI presenters were applying during their presentations.

To resolve this difference in understanding, it was agreed it may be necessary to work through more detailed examples at a future public meeting regarding how, specifically, 10 CFR 50.59, Criterion VI issues of "different results" should be resolved. This more detailed example should include a summary of a completed evaluation of the impact of a design function that was adversely impaired through a possible malfunction of a SSC that was to be changed via a digital instrumentation and control (I&C) upgrade or replacement. An action from the discussion was for the NRC staff to identify examples from FSARs that could be covered at the meeting.

Discussion on Mapping of Terminology between NEI 96-07, Appendix D and NEI 16-16

During the afternoon session of the August 1, 2017, meeting, NRC staff and NEI representatives discussed the relationships between Draft NEI 96-07, Appendix D and NEI 16-16, [Draft 2]. NEI reiterated that it has developed Draft NEI 96-07, Appendix D and NEI 16-16, [Draft 2] to provide licensing and technical CCF guidance intended to replace the corresponding guidance, or fill gaps, within 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 Rule" (ADAMS Accession No. ML020860169).

During the meeting, NEI gave a presentation that clarified how outcomes from applicable portions of the NEI 16-16 technical guidance could feed into NEI 96-07, Appendix D to make a licensing decision under 10 CFR 50.59. During the presentation, NEI maintained the position that NEI 16-16 provides technical design-related guidance for addressing a CCF. NEI emphasized that NEI 16-16 does not need to align with the guidance and evaluation steps within NEI 96-07, Appendix D, which is considered licensing guidance. NEI stated that the goal for NEI 96-07, Appendix D and NEI 16-16 was always for the two documents to be independent entities and that the documents were not created with the intention that they would be "mapped" to each other. NEI explained that NEI 96-07, Appendix D states that NEI 16-16 is one possible source for the CCF technical conclusion.

The NRC staff expressed concerns with this position given that a) the May 16, 2017, draft of Appendix D appears to reference NEI 16-16 as a complementary document to NEI 96-07, Appendix D, b) the documents use similar terminology, and c) the documents, together, are intended to replace NEI 01-01. Given these reasons, the NRC staff stated that the NEI position at the meeting is inconsistent with the NRC digital instrumentation and control (DI&C) Steering Committee's understanding of the relationship between these the documents.

However, NEI made assurances that it intends to remove any confusing terminology (e.g. "CCF Credible") from NEI 96-07, Appendix D and utilize previously-endorsed terminology such as failure likelihood being "sufficiently low" with regard to guidance on the likelihood of new malfunctions. NEI also stated during the meeting that with regard to "Screening" guidance in NEI 96-07, Appendix D, the screening does not need technical CCF guidance to support a finding of whether a proposed modification to an SSC is adverse. In addition, NEI said that due to this position, there is no specific mapping from NEI 16-16 for screening guidance in NEI 96-07, Appendix D.

Discussion on DI&C Guidance not being Migrated to either NEI 96-07, Appendix D or NEI 16-16

The NRC staff expressed concerns that with the potential withdrawal of the NEI 01-01, vital information for implementing DI&C modifications under 10 CFR 50.59 would not be migrated into NEI 96-07, Appendix D or into NEI 16-16. The NRC staff further expressed concern that the vital information in NEI 01-01 would not be addressed in any NRC-endorsed guidance document, potentially leading to new licensing uncertainty. The NRC staff offered an example of where guidance would be lost concerning the use of appropriate codes and standards that may be applicable to the DI&C development process used for upgrading safety-related SSCs. A second example from the NRC staff was the loss of guidance on the applicability of EPRI Topical Reports outlining proper commercial grade dedication processes to follow when using commercial off-the-shelf equipment in safety-related applications.

NEI stated that industry now has processes and procedures in place that account for nearly all the remaining NEI 01-01 technical and licensing guidance needed to perform DI&C upgrades under the 10 CFR 50.59. NEI further stated that those issues pertaining to digital system CCF are not covered but are currently being migrated from NEI 01-01 to NEI 96-07 Appendix D and NEI 16-16. NEI also confirmed that there is currently no regulatory uncertainty issues associated with adherence to the guidance within NEI 01-01 that is not being migrated to these new documents, nor is there expected to be any regulatory uncertainty once NEI 01-01 is eventually withdrawn. The staff remained unconvinced that the digital design guidance from

NEI 01-01 that is not planned for migration into either NEI 96-07, Appendix D or NEI 16-16 is not needed for placement into a NRC-endorsable industry guidance document.

During the path-forward discussions at the meeting, it was agreed that the next monthly meeting would be a working meeting over three days to contemporaneously edit NEI 96-07, Appendix D. It was also agreed that an action was for the NRC staff and NEI to identify clear objectives for the meeting. In addition, NRC staff agreed to look at the information presented at the August 1, 2017, meeting and what the NRC staff currently has as background and provide any feedback to NEI. This was an action from the meeting.

Actions from the August 1, 2017, meeting are:

1) NRC staff will identify examples from FSARs for NEI consideration to clarify how to respond to Criterion VI of 50.59(c)(2), as described in NEI 96-07;
2) NRC staff and NEI will develop objectives for the September 19-21, 2017, meeting; and
3) NRC staff will look at the information presented by NEI representatives at the meeting versus what it has as background prior to the meeting and provide feedback to NEI on any changes that come from the review of the NEI presentation material.

August 2, 2017 Public Meeting

At the August 2, 2017 meeting, NEI provided a high-level discussion of the key industry comments received on the draft RIS date. In addition, NEI presented two examples of qualitative assessments of likelihood of a possible new malfunction in support of safety-related 10 CFR 50.59 upgrades or replacements that were developed using the guidance presented in Draft RIS 2017-XX. One concern raised by NEI was that the RIS appeared to make it more burdensome to document a qualitative assessment for non-safety related components and systems than necessary. NEI commented that the RIS should be applicable to proposed safety-related upgrades and replacements only. The NRC staff noted that common-cause malfunctions introduced via plant modifications that can propagate among two or more non-safety related systems have the potential for putting the plant into an unanalyzed state. Therefore, the RIS is intended to provide guidance for licensees planning to perform digital upgrades with the potential for introducing such malfunctions of non-safety systems.

NEI also stated that the RIS should be clarified and discuss how new malfunctions should be evaluated, signifying “different results” that are evaluated when responding to the criteria in 10 CFR 50.59(c)(2)(vi), as had been discussed during the August 1, 2017, public meeting summarized earlier. Specifically, NEI stated that this issue needs to be clarified in the RIS. Otherwise NEI and industry stakeholders would not support the use of the RIS.

The NRC staff responded that this issue is a generic issue pertaining to any plant modification being performed pursuant to 10 CFR 50.59—not just DI&C modifications. If the issue had to be fully resolved before issuing the DI&C related RIS for use in DI&C applications, then it could be several months before the RIS would be issued. At the conclusion of the public meeting, NEI stated that work on 10 CFR 50.59, Criterion VI could be resolved concurrently with the work on the RIS without impacting the schedule for RIS issuance or the level of support from industry.

NEI commented that it appeared the RIS was advocating a different standard of reasonable assurance for digital DI&C versus “adequate degree of certainty.” If this was a generic issue with 10 CFR 50.59, NEI asked that more clarification be provided.

Two examples of a 10 CFR 50.59 DI&C modification were discussed—one for a safety related

emergency diesel generator digital voltage reference adjuster (DVR), and one for a safety-related chiller controller supporting a main control room HVAC system cooling function. In the discussions of the examples, information from Tables 1 and 2 of the RIS were referenced to illustrate how the examples were responsive to the information described in the tables. An action was taken by NEI to revise the qualitative assessments examples and provide them to the NRC staff for review during the next scheduled meeting.

The concept of "combined design functions" described in the RIS was discussed in detail. It was recommended during the discussion that a meeting on this issue be scheduled. It was agreed that the meeting would be after the conclusion of the public comment period, but prior to the resolution of the public comments. The meeting objective would be to provide clarification for a better understanding of the concept of combined design functions.

NEI expressed a concern that the RIS as written would impact the ability to make non-safety related DI&C modifications. NEI indicated that the RIS was not clear enough on the level of detail needed to document qualitative assessments for non-safety related DI&C modifications. NEI stated that this needed to be addressed better in the final version of the RIS.

Overall, based upon the review of both examples presented by NEI during this meeting, the NRC staff identified a number of specific guidance statements warranting clarification in the RIS. These specifics were based upon comments presented during the meeting. (These areas are included within the enclosure to this summary.) Also, the NRC staff commented that the NEI example regarding the DVR appeared to exhibit the right level of detail, while for the example regarding the chiller controller, detail was lacking in several areas. The NRC staff requested NEI to update the two examples to reflect the staff's observations, and retain them for possible inclusion as example Qualitative Assessments in future guidance.

Additional actions that arose from the discussions were that the NRC staff will: 1) adjust Table 2 of the RIS to include guidance to include the operating status of the device under different conditions such as normal operations, or if the device is under demand; 2) revise the RIS to better explain what is meant by "unlikely series of events"; and 3) clarify in the text or Table 2 as to how to answer the questions in the different 10 CFR 50.59 criteria.

One topic raised by NEI was that the industry was worried that the RIS was turning the 10 CFR 50.59 review for DI&C modifications into an internal license amendment request because of the level of detail identified in the RIS. NEI noted that 10 CFR 50.59 reviews were conducted by individuals who had a great amount of knowledge of the plant and that the analysis did not require the detail identified in the RIS. This comment was based on industry's potential concerns with the level of detail presented in the example qualitative assessments provided during this meeting.

The NRC staff clarified that this draft RIS was intended to be guidance only and it is at the discretion of the licensee to place a sufficient level of detail in the qualitative assessment to justify a likelihood determination. Further, the NRC staff explained that examples are intended to illustrate levels of details for each section that would be acceptable to the NRC staff for such safety-related applications. The NRC staff emphasized that the level of safety significance appropriate to the example should not be taken as "required" responses for every level of safety significance.

A second point raised regarding the level of detail identified in the RIS was that the purpose of the 10 CFR 50.59 review is to make a determination as to whether a license amendment request is needed. It is not to provide a detailed safety analysis.

The NRC staff explained that during inspections of 10 CFR 50.59 evaluations performed from 2009 through 2014, NRC inspectors were finding that some licensees were not performing 10 CFR 50.59 screenings and evaluations of proposed DI&C modification packages properly. Hence, the RIS was developed in an effort to help licensees prepare acceptably complete 10 CFR 50.59 DI&C modification packages. This is one method of documenting the technical basis for evaluating decisions as to whether a license amendment request was required by performing adequate qualitative assessments. It would also allow NRC inspectors to identify the necessary information supporting this technical basis all in one package.

Once the discussions regarding details of the RIS were completed, the planned path forward for completing and issuing the RIS for use was reviewed. The NRC staff stated that the public comment period was being extended by two weeks to allow for additional deliberation on the feedback from this meeting that could result in possible additional RIS comments.

The next steps would be to consolidate all the public comments into common themes; disposition the comments; redraft the RIS; and initiate the NRC agency inter-office concurrence process. The NRC Committee to Review Generic Requirements would evaluate the RIS for any backfitting impacts and the Office of General Counsel (OGC) would evaluate it to confirm there was no legal objection.

It was also stated that the RIS would have to be evaluated under the Congressional Review Act (CRA) process. If OGC determined the RIS was a rule under the CRA, then the NRC would have to provide it to the Office of Management and Budget (OMB) to determine if it was a major rule.

The time allowed for OMB review was up to 90 days so there could be some impact. Plus, there is a new threshold for providing a Federal action to OMB for review. These two combined could impact the schedule for issuing the final RIS.

NEI recommended that once the comments were received and assessed, a public meeting should be held either during the week of September 11 or 25, 2017, to discuss them. It was agreed by the NRC staff that such a meeting would be held to ensure there was a clear understanding of the comments.

Also, NEI representatives asked whether the NRC staff would develop an implementation plan for the RIS. Although this is not usually performed for a RIS, the industry concern was if the RIS is issued and applied immediately, it would impact 10 CFR 50.59 packages that are currently in process or nearly complete. An implementation plan that provided guidance on when the RIS was expected to be put into effect to support NRC inspections of 10 CFR 50.59 modifications would help ensure a smooth transition. The NRC staff agreed to review this recommendation, and develop a plan outlining its expectations regarding the implementation scheduling in its communications with the public. This was an action from the meeting.

A comment from a stakeholder focused on the chiller example discussed during the meeting. The stakeholder stated that he understood the example to address chillers for control rooms. However, he stated he had learned that some plants use chillers for spent-fuel pools (SFP). He expressed concern that the example regarding CCF due to DI&C that was discussed could be inappropriate for CCF associated with SFP chillers. The basis for this concern was that the country with the greatest earthquake experience, Japan, had an earthquake event and subsequent tsunami with a magnitude that had not been anticipated. The stakeholder stated he would be providing comments on the RIS regarding this example.

Actions from the August 2, 2017, meeting included:

1) NRC staff will revise the RIS as stated above to incorporate comments provided during this public meeting
2) NRC staff and NEI will look to schedule a meeting the week of September 11 or 25, 2017, to discuss the RIS comments to ensure a clear understanding of the comments.
3) NEI representatives will revise the qualitative assessments examples provided during this meeting and provide them to the NRC staff for review during the next scheduled meeting.
4) NRC staff will develop a plan outlining its expectations regarding the implementation schedule for the RIS.

Docket No.: 99902028

Specific Issues Warranting Clarification of the Regulatory Issue Summary 2017-XX

- Under Step 3 of Table 2 of the attachment, correct the typographic error from “Criterion (iv)” to say “Criterion (vi)”
- Under Step 1 of Table 2 of the attachment, clarify that a modification description should be simple, but thorough such that the basic differences between the old design and the proposed design is clear (e.g. addition to new design features such as digital displays in the main control room whereas display information was nonexistent previously.
- Under Step 2 of Table 2 of the attachment, clarify that new design functionality can lead to potential new failure modes, which potentially can lead to new malfunctions with different results.
- Under “Design Attributes” section in Table 1, enhance the concept of “sufficiently simple” as described in Section 5 of 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 Rule”. Also, clarify the use of the term “external” watchdog timer—evaluate substitution with “externally triggered” watchdog timer.
- Under Step 7 of Table 2, clarify that the Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.59 evaluation answers should be documented in the qualitative assessment.
- On page 2 of the attachment, it should state that reasonable assurance of low likelihood of failure may be derived from a qualitative assessment of factors involving system design features, the quality of the development processes employed (rather than the design process), and the operating history.
- For Section 5.1, clarify to account for concerns with non-safety related modifications and codes/standards.
- On page 4 of the attachment, correct the reference to Appendix B—it should reference the definition of safety related as identified in 10 CFR 50.2
- Also on page 4 of the attachment, clarify what is meant by “credible” malfunctions.
- In Section 3 (page 5 of the attachment) explain the intent of the introductory paragraph for this section.
- Under Section 3, point 1 of the attachment, clarify what is meant by “combination of design functions” to accommodate reductions in the amount of components performing the same design function.
- For Table 1 of the attachment, clarify that it is at the discretion of the licensee to address every bullet under each attribute rather than every bullet being required to be addressed. The bullets represent a non-exhaustive list of features. It is intended to be at the discretion of the licensee to determine how many bullet items, (or other items not listed on the table), should be used as a justification.
- General comment to clarify in the qualitative assessment the use of commercial grade dedication packages, especially regarding application of critical digital reviews.
- For Figure 1, it appears that the “Yes” and “No” outcomes of the first decision box are reversed.

- In Section 5 (page 13 of the attachment) consider a way to distinguish the level of detail needed for documenting safety related system qualitative assessment documentation versus non-safety related system qualitative assessments.

SUBJECT: SUMMARY OF AUGUST 1 AND 2, 2017, MONTHLY MEETING TO DISCUSS NEI 96-07, APPENDIX D AND THE REGULATORY INFORMATION SUMMARY ON DIGITAL INSTRUMENTAION AND CONTROL 10 CFR 50.59 GUIDANCE DATED: OCTOBER 11, 2017

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