

**Areas for Clarification requested by the NRC Regarding the
Nuclear Energy Institute Comments on the
nine ARCAP Interim Staff Guidance documents and Draft Regulatory Guide 1404**

1. A general comment was made for each interim staff guidance document (ISG) that stated they should be technology-inclusive and equally applicable to both LWR and non-LWR designs. The nine ISG were developed based on the premise that applicants would be using the Licensing Modernization Project (LMP) methodology detailed in NEI 18-04, Revision 1, "Risk-Informed Performance-Based Technology Guidance for Non-Light Water Reactors." Given the scope of the LMP-related guidance documents is limited to non-LWR designs, please elaborate on how the applicability of DG-1404 and other draft guidance documents could be extended beyond non-LWRs (Noting that guidance does mention possible adoption by LWRs and recommends that would be a topic for preapplication discussions).
2. Multiple comments involve the extension or expansion of guidance to manufacturing licenses (MLs) and/or standard design approvals (SDAs). NEI 21-07, Revision 1, as stated in comment #2 for DG-1404, does not include MLs or SDAs within its scope. The NRC staff would like clarification regarding how the guidance could be expanded (beyond noting the general similarities between the application content for design certifications and other design-centered applications) given the limited scope of NEI 21-07, Revision 1 and the variability in approaches to how MLs might be used.
3. The Federal Register notice for the Technical Specifications ISG had a statement that read:

The Risk-informed Technical Specification draft ISG correlates the text in 10 CFR 50.36, "Technical specifications," with the analysis and outputs of the risk-informed approach described in Nuclear Energy Institute 18-04, Revision 1, "Risk- Informed Performance-Based Technology Guidance for Non-Light Water Reactors," (ADAMS Accession No. ML19241A472), and with the principal design criteria applicable to the design. In addition to general comments on this draft ISG, the NRC is seeking public comment on whether the correlation previously described can be interpreted as a departure from the regulation text and whether the NRC staff will need to consider whether exemptions are necessary.

The submitted comments did not provide any feedback on this topic. Was NEI aware of this request regarding feedback on exemptions for technical specifications?

4. In comment #16 for DG-1404, NEI states that LWR GSIs, USIs, and TMI action requirements should not apply to non-LWRs. Appendix B of DANU-ISG-2022-01, Appendix B, "Analysis of Applicability of NRC Regulations to Non-Light-Water Power Reactors," discusses the applicability of the regulations to non-LWRs, including those in 10 CFR 50.34. Is the comment suggesting that additional guidance is needed regarding the relevance of specific safety issues to specific reactor designs and, if so, is industry aware of any efforts on developing such assessments?

5. In comment #13 for DANU-ISG-2022-01, requests that additional guidance for PDCs not informed by the LMP process. It is difficult to provide prescriptive lists of topics possibly subject to PDC because of the wide variety of reactor technologies and related SSCs that will be supporting both normal and off-normal conditions. General guidance and examples are provided in RG 1.232 and the draft guidance issued for comment, including DANU-ISG-22-01. When discussing this comment, it would be helpful to include examples of topics or SSCs for which NEI has questions on whether they should be addressed within the PDC. The comment also suggests that the SR and NSRST SSC categories would be used only as they are defined within the LMP methodology. Please elaborate on whether industry is planning to have a separate categorization process for SSCs not informed by the LMP process?
6. In comment #33 for DG-1404, NEI proposed to remove Addition C.5.a that discusses defense-in-depth (DID). The NRC staff are unsure why NEI proposes to remove this guidance because it seems that it will be necessary when developing an application. Does industry intend for TIRICE and/or TIMaSC to cover this information?
7. In comment #50 of DG-1404, NEI states that the guidance convolves inappropriately special treatments with testing and validation. When discussing this comment, it would be helpful for NEI to discuss the special treatment activities, such as inspections and testing, that would be performed prior to operations, how they would be captured in a CP or COL application, and how the completion of those activities would support findings needed for an OL or findings under 52.103(g).
8. In comment #14 of DG-1404, industry mentions ALARA not extending into the design, as a regulatory requirement. The NRC staff notes that the applicability of ALARA requirements continues to address applications for standard design certifications, standard design approvals and manufacturing licenses. While the guidance offers some performance-based approaches for applications and related NRC reviews, design features to support keeping occupational exposures ALARA are to be part of the applications (see DANU-ISG-2022-04, ARCAP Chapter 10). If needed, please include additional discussion on this comment.
9. In comment #5 of DANU-ISG-2022-06 (Chapter 12), NEI requests confirmation that additional requirements are not added for quality assurance for CPs per 10 CFR 50.34(a)(7). This comment provides an opportunity for a more general discussion on the handling of NSRST SSCs and how potential special treatments related to pre-operational activities (e.g., design, fabrication, construction, etc.) will be addressed outside of the descriptions in Chapter 7. When discussing this comment, please elaborate on where approaches such as LMP call for adjustments to address the increased role of NSRST SSCs in the licensing process and how that will be addressed within various parts of applications.
10. Comment #6 of DANU-ISG-2022-09 (Fire Protection), discusses fire protection requirements may be less relevant for microreactors and SMRs. When discussing this comment, it would be helpful for NEI to elaborate on when and how to address specific reactor types within technology-inclusive guidance related to existing regulations.

In addition, it would be helpful to clarify examples of industry standard(s) that could be referenced to provide a basis to relax “traditional” fire protection program elements such

as fire brigade staffing and fire protection staff training? Note that the ISG currently references NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," NFPA 804, "Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants," and NFPA 806, "Performance-Based Standard for Fire Protection for Advanced Nuclear Reactor Electric Generating Plants Change Process."

11. Regarding NEI's comment #3 for the Chapter 11 ISG, the NRC staff would like clarification regarding examples of the type of acceptance criteria being requested for organizational staffing descriptions (beyond numbers of licensed operators) such as "key positions for ensuring the safe operation of the plant," descriptions of "groups and key positions responsible for implementing the initial test program," and "sufficient managerial depth"?