

stating that the risk-informed Code Cases and Standards developed by ASME should not be directly referenced in the rule, but that there should be a framework developed to ensure that the Code Cases are used, and that partial use does not occur. The proposed rule permits, but does not require, use of the Code Cases for purposes of meeting rule requirements. The Commission notes that these Code Cases cover both categorization and treatment requirements in the areas of inservice inspection, inservice testing, and repair/replacement. The Commission expects licensees will utilize the ASME Code Cases as part of their implementation of § 50.69.

Another commenter stated that the rule should be made applicable to applicants as well as license holders, and NRC agreed that this was appropriate and made revisions to the rule language to accommodate this. Another commenter stated that the wording of the requirement to “assure risk is small from changes to treatment” set an impossible standard, and that the rule wording should be revised to allow use of sensitivity studies to provide confidence that the risk is small. The NRC agreed with this comment and revised the rule wording in the manner suggested that the licensee provide reasonable confidence that the increase in risk is small through performance of appropriate evaluations, such as sensitivity studies for SSCs modeled in the PRA.

A commenter thought it was unnecessary to require that a schedule or scope of systems to be categorized be part of the submittal. It was noted that implementation of the rule would of necessity occur over time, and that existing requirements would remain in effect until SSCs were categorized. Thus, the commenter believes that a licensee should not be held to any particular schedule for implementation. The NRC’s intent in requesting a schedule and scope was for informational purposes to know what requirements would be in effect, but agrees that a firm commitment to a schedule is not required. This part of the rule was removed, and instead there is a requirement to update the FSAR, in accordance with § 50.71(e), to reflect implementation as it occurs for particular systems.

IV.3.0 Pilot Plants

To aid in the development of the proposed rule and associated implementation guidance, several plants volunteered to conduct pilot activities with the objective of exercising the proposed NEI implementation guidance

and using the feedback and lessons-learned to improve both the implementation guidance and the governing regulatory framework. The pilot effort was supported by three of the industry owners groups who identified pilots for their reactor types and participated by piloting sample systems using the draft NEI implementation guidance. Supporting the pilot effort were the Westinghouse Owners Group with lead plants Wolf Creek and Surry, the BWR Owners Group with lead plant Quad Cities, and the CE Owners Group with lead plant Palo Verde. The B&W Owners Group did not participate, but did follow the pilot activities.

The NRC staff’s participation and principal point of interaction in the pilot effort was primarily in observation of the deliberations of the integrated decision-making panel (IDP). By observing the IDP, the NRC staff was able to view the culmination of the categorization effort and gain good insights regarding both the robustness of the categorization process in general, and the IDP decision-making process specifically. Following each of the pilot IDPs, the staff developed and issued a trip report containing the staff’s observations.

The following points set forth the principal lessons learned and key feedback from the NRC staff’s observations of the pilot activities.

- Potential treatment changes and their potential effects need to be understood by the IDP as part of the deliberations on categorization.
- The pilots showed the importance of documentation of the IDP decisions and the basis. The rule contains a requirement for the categorization basis to be documented (and records retained) in § 50.69(f).
- The pilots experienced difficulty in explicit consideration about safety margins, especially in view of the fact that functionality must be retained. In the first draft rule language posted, requirements were included for the IDP to consider safety margins in its deliberations. Based upon the pilot experience, NRC adjusted its approach to margins to include this in the section of the rule that requires consideration of effects of changes in treatment and the use of evaluations as the means of providing reasonable confidence safety margins are maintained.
- The need for a number of improvements to the implementation guidance in NEI 00–04 were noted, for instance, improvement in a defense-in-depth matrix presented therein, and the need for more specific guidance on making decisions where quantitative

information is not available. These lessons-learned were factored into the revised version of NEI 00–04.

- During the pilot activity, pressure boundary (“passive”) functions were also categorized using the draft version of an ASME Code Case on categorization available at that time. A separate categorization process was used for these passive functions because it was recognized by pilot participants that the approach for these SSCs must be somewhat different than for “active” functions because of such considerations as spatial interaction. Specifically, if a pressure boundary SSC failed, the resulting high-energy release or flooding might impact other equipment in physical proximity, so the process needed to account for those effects in addition to the significance of the SSC that initially failed.

Improvements to the ASME Code Case for categorization of piping (and related components) were identified and fed back into the code development process.

- The pilot experiences also revealed the intricacies of the relationship between “functions” (which play a role in decisions on safety significance) and “components” (importance measures are associated with components and treatment is also generally applied on a component basis). Because a particular component may support more than one function, the categorization of the component needs to correspond with the most significant function and means must be provided for a licensee to “map” the components to the functions they support.

- At each pilot, the NRC noted that the IDP needed to include consideration of long term containment heat removal in characterizing SSCs. The NRC considers retention of long term containment heat removal capability important to defense-in-depth for light water reactors.

- Finally, a number of lessons were learned about how to conduct the IDP process, such as training needs, materials to be provided to the panel, etc. As a result of this feedback, NEI revised NEI 00–04 and developed draft revision C of the implementation guidance (discussed in Section VI).

IV.4.0 South Texas Exemption as Proof-of-Concept

A major element of the rulemaking plan described in SECY–99–256 was the review of the South Texas Project Nuclear Operating Company (STPNOC) exemption request. The review of the STPNOC exemption request was viewed as a proof-of-concept prototype for this rulemaking rather than a pilot because it preceded development of draft rule