

gives both the licensee and the NRC the ability to understand the basis for the categorization decision, should questions arise at a later date.

The proposed rule would contain general requirements for consideration of SSCs, modes of operation or initiating events not modeled in the PRA. As a result, the implementing guidance plays a significant role in effective implementation, and bolsters the need for NRC review and approval of the categorization process before implementation. As noted in the ANPR, the Commission could include more requirements in the rule itself, rather than only being in the guidance. Public comment is requested on the merits of placing the additional detail shown in the guidance and discussed in Section V.4 of the Statement of Considerations (SOC) in the rule.

Implementation of the categorization process relies heavily on the skills, knowledge, and experience of the people that implement the process, in particular on the qualifications of IDP members. Therefore, the Commission concludes that requirements are necessary for the composition of the panel to be experienced personnel who possess diverse knowledge and insights in plant design and operation and who are capable in the use of deterministic knowledge and risk insights in making SSC classifications.

The PRA used to provide the risk information to the categorization process is required to be subjected to a peer review. The peer review focuses on the PRA completeness and technical adequacy for determining importance of particular SSCs, including consideration of the scope, level of detail, and technical quality of the PRA model, the assumptions made in the development of the results, and the uncertainties that impact the analysis. This provides assurance that for IDP decisions that utilize PRA information that the results of the categorization process provide a valid representation of the risk importance of SSCs.

Before implementation of § 50.69, the NRC will approve the categorization process, through a license amendment, because of the importance of the PRA and categorization process to successful implementation of the proposed rule. This review will determine whether the licensee's application satisfies the § 50.69 requirements, and consider the adequacy of the PRA, focusing on the results of the peer review and the actions taken by the licensee to address any peer review findings. The Commission has determined that a focused NRC staff review of the PRA is necessary because there are key

assumptions and modeling parameters that can have a significant enough impact on the results such that NRC review of their adequacy for this application is considered necessary to verify that the overall categorization process will yield acceptable decisions.

Section 50.69(c)(iv) would require that a licensee or applicant provide reasonable confidence that for SSCs categorized as RISC-3, sufficient safety margins are maintained and that any potential changes in core damage frequency (CDF) and large early release frequency (LERF) resulting from the implementation of § 50.69 are small. That is, plants with total baseline CDF of 10^{-4} per year or less would be permitted CDF increases of up to 10^{-5} per year, and plants with total baseline CDF greater than 10^{-4} per year would be permitted CDF increases of up to 10^{-6} per year. Plants with total baseline LERFs of 10^{-5} per year or less would be permitted LERF increases of up to 10^{-6} per year, and plants with total baseline LERFs greater than 10^{-5} per year would be permitted LERF increases of up to 10^{-7} per year. However, if there is an indication that the baseline CDF or LERF may be considerably higher than these values, the focus of the licensee should be on finding ways to reduce risk and the licensee may be required to present arguments as to why steps should not be taken to reduce risk in order to consider the reduction in special treatment requirements. This is consistent with the guidance in Section 2.2.4 of RG 1.174. It should be noted that this allowed increase shall be applied to the overall categorization process, even for those licensees that will implement § 50.69 in a phased manner. Thus, the allowable potential increase in risk must be determined in a cumulative way for all the SSCs being recategorized.

Section 50.69 contains requirements for maintaining the design basis of the facility. These requirements, considered in conjunction with the requirements to maintain the potential change in risk as small (as discussed above), ensure that safety margins are maintained. The performance of candidate RISC-3 SSCs should not be significantly degraded by the removal of special treatment. This is because the licensee is required to implement processes that provide reasonable confidence that SSCs remain functional, that is, remain capable of performing their function with a reliability that is not significantly degraded to such an extent that there will be a significant number of failures that can lead to unacceptable increases in CDF or LERF.

The proposed rule would require applicants and licensees to perform evaluations to assess the potential impact on risk from changes to treatment. For SSCs modeled in the PRA, this would likely be accomplished by sensitivity studies to assess the impact of changes in SSC failure probabilities or reliabilities that might occur due to the revised treatment. For example, a licensee would be expected to increase the failure rates of RISC-3 SSCs by appropriate factors to understand the potential effect of applying reduced treatment to these SSCs (*e.g.*, reduced maintenance, testing, inspection, and quality assurance). For other SSCs, other types evaluations would be used to provide the basis for concluding that the potential increase in risk would be small. A licensee will need to submit its basis to support that the evaluations are bounding estimates of the potential change in risk and that programs already in existence or implemented for proposed § 50.69 can provide sufficient information that any potential risk change remains small over the lifetime of the plant. A licensee is required to consider potential effects of common-cause interaction susceptibility and potential impacts from known degradation mechanisms. To meet this requirement, a licensee would need to: (a) Maintain an understanding of common-cause effects and degradation mechanisms and their potential impact on RISC-3 SSCs; (b) maintain an understanding of the programmatic activities that provide defenses against common cause failures (CCFs) and failures resulting from degradation; and (c) factor this knowledge into the treatment applied to the RISC-3 SSCs.

The proposed rule focuses on common-cause effects because significant increases in common-cause failures could invalidate the evaluations, such as sensitivity studies, performed to show a small change in risk due to implementation of § 50.69. With respect to known degradation mechanisms, this is an acknowledgment that certain treatment requirements have evolved over time to deal with such mechanisms (*e.g.*, use of particular inspection techniques or frequencies), and that when contemplating changes to treatment, the lessons from this experience are to be taken into account.

For SSCs categorized by means other than PRA models, the licensee would need to provide a basis to conclude that the small increase in risk requirement would still be met in light of potential changes in treatment. All of these requirements are included in § 50.69 so that a licensee has a basis for