

NRC Staff Evaluation of the Nuclear Energy Institute's (NEI's) February 25, 2016 Proposal for a "Conditional Compliance Schedule" for Final 10 CFR 50.46c Rulemaking

In a February 25, 2016, letter to the Chairman of the NRC (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16061A378), the NEI requested that the Commission adopt a "conditional compliance schedule." Under NEI's proposal, a plant would be required to comply with § 50.46c of Title 10 of the *Code of Federal Regulations* (10 CFR) only if a plant change is made or error discovered requiring a "new Evaluation Model" attributable to, for example, a power uprate, a new fuel design, or changes or errors affecting peak cladding temperature, (*i.e.*, "trigger criteria"). Plants not requiring a new Evaluation Model would continue to comply with the existing § 50.46.

The NEI proposal was not presented in their August 21, 2014, comments on the proposed rule (ADAMS Accession No. ML14237A149), nor in the series of public meetings¹ on § 50.46c implementation held in 2015. The implementation approach contained in the final rule was developed largely based on public comments received on the proposed rule, including those from the industry, and discussions held during the public meetings. The concept of "conditional compliance" was first identified by NEI at the November 3, 2015, Advisory Committee on Reactor Safeguards (ACRS) subcommittee meeting and reiterated by NEI at an ACRS full committee meeting on February 4, 2016. The February 25, 2016, letter presents the first formal comment addressed to the NRC on the conditional compliance implementation approach.

After the November 2015 subcommittee and the February 2016 full committee meetings, the NRC staff evaluated the conditional compliance concept as described by NEI in its presentations to the ACRS. For the reasons stated below, the staff decided that the implementation approach contained in the final rule remains the best approach to provide reasonable assurance of adequate protection of public health and safety. The NEI's February 25, 2016, letter presents no additional information which would cause the staff to change its earlier determination.

Under NEI's conditional compliance proposal², the NRC would bear the regulatory burden of assuring that each licensee who has not transitioned to § 50.46c continues to exhibit safety margins with respect to the research findings. The research findings that form the technical basis for the draft final § 50.46c are applicable to fuel designs and emergency core cooling systems in operation today. Therefore, the staff determined that the conditional compliance concept would not, by itself, adequately address the research findings in a manner sufficient to provide reasonable assurance of adequate protection of public health and safety for those plants that would not be required to comply with new rule. To address this concern, the staff would likely recommend issuance of additional regulatory requirements, such as information collection and reporting requirements, for licensees who have not transitioned to § 50.46c. These new requirements would shift the burden on confirming existing safety margin from the NRC staff back onto the licensees.

In addition, substantial staff resources and stakeholder interaction will be needed to develop the trigger criteria for transitioning to § 50.46c. While the NEI proposal provides some high-level

¹ A list of key public meetings that the NRC staff conducted throughout the rulemaking is provided in ADAMS under Accession No. ML16011A007.

² The staff notes that the NEI conditional compliance proposal embraces elements of both Alternatives 1 and 2 in the regulatory analysis for the final § 50.46c rulemaking. Thus, the benefits and costs of the NEI proposal are not easily discerned from the regulatory analysis for the final § 50.46c rulemaking.

examples, additional details would be needed to provide clear regulatory requirements and associated guidance to the industry and staff on the appropriate triggers. Imposing the information collection and reporting requirements and performing the subsequent plant specific evaluations, when combined with the resources needed to develop the trigger criteria, may be less cost-effective than implementing the generic requirements to address the research findings in the draft final § 50.46c rule.

Inasmuch as the proposed trigger criteria and the additional information collection and reporting requirements for plants remaining under § 50.46 are probably not defensible as a “logical outgrowth” of the proposed § 50.46c rule, the NRC must publish a supplemental proposed rule in the *Federal Register* to provide an opportunity for public comment (limited to those matters). Based on the staff’s concerns with the conditional compliance concept, the staff concluded that transmittal of the final rulemaking to the Commission should not be further delayed to incorporate the NEI proposal.

Finally, the staff believes that any special circumstances encountered by licensees can be handled with existing regulatory processes without delaying the final § 50.46c rule to develop additional regulatory provisions to implement the NEI proposal. In developing the seven-year implementation schedule, the staff was mindful of the current operational environment for nuclear power plants which includes plants that have announced an intent to permanently cease operation within the next few years and those whose license may expire either during or shortly after the established schedule. The staff concluded that the implementation schedule contained in the final rule allows sufficient flexibility both in implementation scheduling and the use of existing regulatory processes, such as exemptions, such that licensees would not incur unnecessary costs in transitioning to § 50.46c.