

RUSSELL J. BELL
Senior Director, New Plant Licensing

1201 F Street, NW, Suite 1100
Washington, DC 20004
P: 202.739.8087
rjb@nei.org
nei.org



March 14, 2014

Mr. Michael C. Cheok
Director
Division of Construction Inspection and Operational Programs
Office of New Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: White Paper on *Proposed Improvements to Tier 1 and the Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) for Small Modular Reactors*, dated March 14, 2014

Project Number: 689

Dear Mr. Cheok:

On behalf of the nuclear energy industry, the Nuclear Energy Institute (NEI)¹ is transmitting the attached white paper, *Proposed Improvements to Tier 1 and the Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) for Small Modular Reactors*, for discussion with the NRC. This white paper describes several improvements that build upon the concepts we proposed at an NRC public meeting on February 11, 2014. It is our view that the proposals would improve regulatory efficiency and effectiveness, can be implemented through guidance without the need for rulemaking or policy changes, and would not result in any reduction in the public health and safety.

The proposed improvements are based upon lessons learned from the development of Tier 1 and ITAAC for several design certification (DC) applications (including consideration of RIS-2008-05), and the implementation of ITAAC by combined license (COL) holders. The proposals also reflect efficiencies made possible by the modular design and factory construction attributes of small modular reactors. The improvements promote standardization of Tier 1 and ITAAC to the maximum extent practical in order to enhance the efficiency of ITAAC review and implementation processes. In particular, Appendix B to the industry white paper proposes a set of standardized ITAAC types that is expected to encompass

¹ NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

Mr. Michael C. Cheok

March 14, 2014

Page 2

approximately 90% of the ITAAC for all near term SMR applicants. In addition, the paper describes proposed process enhancements that would mitigate the surge of ITAAC closures in the later stages of construction.

At the February 11 public meeting, the NRC staff indicated that they plan to update the guidance on ITAAC in the standard review plan (SRP), NUREG-0800 Section 14.3. As discussed in that meeting, we are providing this white paper as input to this SRP update and look forward to discussing the proposed Tier 1/ITAAC improvements in public meetings over the next few months.

If you have any questions or require additional information, please contact Marc Nichol (mrn@nei.org; 202-739-8131) or me.

Sincerely,

A handwritten signature in black ink, appearing to read "RJ Bell", is positioned above the printed name.

Russell J. Bell

Attachments

c: Mr. Brian C. Anderson, NRO/DCIP/IGCB, NRC
Mr. Joseph Colaccino, NRO/DARR/APOB, NRC
Mr. Christopher R. Welch, NRO/DCIP/IGCB, NRC