

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

February 25, 2016

MEMORANDUM TO:	Victor M. McCree Executive Director for Operations
FROM:	Annette L. Vietti-Cook, Secretary /RA/
SUBJECT:	STAFF REQUIREMENTS – SECY-15-0106 – PROPOSED RULE: INCORPORATION BY REFERENCE OF INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS STANDARD 603-2009, "IEEE STANDARD CRITERIA FOR SAFETY SYSTEMS FOR NUCLEAR POWER GENERATING STATIONS" (RIN 3150-AI98)

The Commission has disapproved staff's recommendation to publish for comment in the *Federal Register* the proposed rule: Incorporation by Reference of Institute of Electrical and Electronics Engineers Standard 603-2009, "IEEE Standard Criteria for Safety Systems for Nuclear Power Generating Stations," at this time.

The staff should develop an integrated strategy to modernize the NRC's digital instrumentation and control (I&C) regulatory infrastructure. The staff should provide the plan, with proposed implementation milestones, to the Commission within 90 days from the date of this SRM. In developing a draft plan, the staff should engage in public workshops and meetings with the relevant IEEE standards setting committee, digital I&C vendors, licensees, and any other external stakeholders to reach a common understanding of the digital I&C regulatory challenges, priorities, and potential solutions to address them. After developing the plan, the staff should continue to provide for meaningful participation by stakeholders. Along with the plan, the staff should present any policy issues that are ripe for Commission consideration, enabling the Commission to address these issues before rulemaking proceeds, especially where there is significant disagreement on the optimal approach.

The staff's plan should consider the broader context of digital I&C regulatory challenges and include all related activities being pursued by the staff, including incorporation of IEEE Std. 603-2009 into 10 CFR 50.55a, updates to the policy on common-cause failure in SRM- SECY-93-087, and development of guidance for 10 CFR 50.59 evaluations of digital I&C upgrades.

The staff's plan should be guided by the following high level principles:

The staff's plan should include the establishment of a senior management steering committee to oversee resolution of digital I&C regulatory challenges.

Any new or revised requirements addressed in the action plan should be performance-based rather than prescriptive.

Digital I&C safety requirements should be technology neutral, however, guidance should be tailored if necessary. In addition, the same requirements should apply to operating and new reactors.

Guidance should focus on acceptable approaches to complying with requirements and may include specific technology-focused provisions. If only one approach is acceptable to the staff to ensure safety based on current understanding, and this approach is appropriately technology-neutral and performance-based, then it should be included in a requirement rather than in guidance.

NRC requirements and guidance should not pose an unnecessary impediment to advancement in nuclear applications of digital technology.

cc: Chairman Burns Commissioner Svinicki Commissioner Ostendorff Commissioner Baran OGC CFO OCA OPA ODs, RAs, ACRS, ASLBP (via E-Mail)