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

April 18, 2019

Dr. Peter C. Riccardella, Chairman
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: RESPONSE TO THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS' LETTER REGARDING DRAFT SECY PAPER AND GUIDANCE DOCUMENTS TO IMPLEMENT A TECHNOLOGY-INCLUSIVE, RISK-INFORMED, AND PERFORMANCE-BASED APPROACH TO INFORM THE CONTENTS OF APPLICATIONS FOR LICENSES, CERTIFICATIONS, AND APPROVALS FOR NON-LIGHT-WATER REACTORS

Dear Dr. Riccardella:

I am responding to your letter dated March 19, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19078A240), in which the Advisory Committee on Reactor Safeguards (ACRS) provided its findings and recommendations concerning the U.S. Nuclear Regulatory Commission draft SECY paper, "Technology-Inclusive, Risk-Informed, and Performance-Based Approach to Inform the Content of Applications for Licenses, Certifications, and Approvals for Non-Light-Water Reactors" (ADAMS Accession No. ML18270A334), and the associated draft Regulatory Guide DG-1353 (ADAMS Accession No. ML18271A164).

In its letter, the Committee provided several conclusions and a recommendation. The Committee concluded that the staff's paper proposes an approach, which has matured to the point of being ready for application, to accomplish three objectives: (1) to select licensing basis events, (2) to classify structures, systems, and components, and (3) to access the adequacy of defense-in-depth for new designs. Additionally, the Committee concluded that the guidance proposed in DG-1353 is adequate to support implementation of the approach described in the SECY paper, with the exception that guidance for developing mechanistic source terms should be expanded.

The Committee recommended that the Commission adopt the approach proposed by the staff for a technology-inclusive, risk-informed, and performance-based methodology for informing the licensing basis and content of applications for non-light-water reactors.

The staff appreciates the Committee's review and feedback, as well as the thoughtful discourse during the June 22 and October 30, 2018, Future Plant Designs Subcommittee and February 6-8, 2019, ACRS Full Committee meetings. The staff notes that there are on-going efforts for developing mechanistic source term guidance and we will engage the ACRS on this topic in the future.

The staff plans to publish DG-1353 for comment, and then interact with the ACRS prior to issuance of the final regulatory guide. The staff looks forward to further interaction with the Committee on other upcoming advanced non-light-water reactor topics.

Sincerely,

/RA/

Frederick D. Brown, Director
Office of New Reactors

cc: Chairman Svinicki
Commissioner Baran
Commissioner Burns
Commissioner Caputo
Commissioner Wright
SECY

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