

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 7, 2018

Dr. Michael L. Corradini, Chairman Advisory Committee on Reactor Safeguards U.S. Nuclear Regulatory Commission Washington, DC 20555

SUBJECT: SAFETY EVALUATION FOR WCAP-17938-P, REVISION 2, "AP1000

IN-CONTAINMENT CABLES AND NON-METALLIC INSULATION DEBRIS

INTEGRATED ASSESSMENT"

## Dear Dr. Corradini:

In its letter dated April 12, 2018, the Advisory Committee on Reactor Safeguards (ACRS) reported on its review of the staff's draft safety evaluation for the Westinghouse Electric Company, LLC, Topical Report WCAP-17938-P, Revision 2, "AP1000 In-Containment Cables and Non-Metallic Insulation Debris Integrated Assessment," dated June 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18102A074). The ACRS concluded the following:

- The methodology described in the topical report to establish the loss-of-coolant accident break size for debris assessment is appropriate.
- The requirement that non-metallic insulation be encapsulated in containers that are located beyond a specified distance from the origin of a loss-of-coolant accident jet is sufficient to avoid producing fibrous debris from this source.
- Testing showed that unprotected cables could be damaged and produce fibrous debris when located within a distance from a loss-of-coolant accident jet that is determined by the break diameter.
- The recommended distance of four break diameters from a loss-of-coolant accident jet, at which unprotected cables would not be damaged, has been shown by testing to be sufficiently conservative to bound plant conditions with high likelihood.
- The added provisions that require separate qualification of cabling not covered by the testing performed are appropriate, and the staff's safety evaluation should be issued.

M. Corradini

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In accordance with the ACRS's review and recommendation on May 29, 2018, the staff issued the Final Topical Report Safety Evaluation (ADAMS Accession No. ML18128A156).

We look forward to working with the ACRS in the future.

Sincerely,

/RA Daniel Dorman Acting for/

Victor M. McCree Executive Director for Operations

Project No. 0811

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

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