March 30, 2017

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

## SUBJECT: SAFETY EVALUATION OF TOPICAL REPORT APR1400-Z-M-TR-12002-P, "KCE-1 CRITICAL HEAT FLUX CORRELATION FOR PLUS7 THERMAL DESIGN"

Dear Dr. Bley:

On behalf of the U.S. Nuclear Regulatory Commission staff, I would like to thank you for the Advisory Committee on Reactor Safeguards' (ACRS) letter of February 23, 2017, regarding the safety evaluation report for Topical Report APR1400-Z-M-TR-12002-P, Revision 0, "KCE-1 Critical Heat Flux Correlation for PLUS7 Thermal Design," associated with the Advanced Power Reactor 1400 (APR1400) design certification application. Your letter followed discussions on this subject during the 640<sup>th</sup> meeting of the ACRS held February 9 – 11, 2017.

The ACRS concluded that the use of the KCE-1 correlation is acceptable for calculating critical heat flux for PLUS7 fuel subject to the conditions and limitations discussed in the staff's safety evaluation report. Your favorable letter is an important milestone in the ongoing effort to complete review of the design certification application. The staff continues to work on many areas of the APR1400 design certification and looks forward to meeting with the ACRS in the future.

Sincerely,

## /RA Michael R. Johnson Acting for/

Victor M. McCree Executive Director for Operations

Docket No. 52-046

cc: Chairman Svinicki Commissioner Baran Commissioner Burns SECY

## SUBJECT: SAFETY EVALUATION OF TOPICAL REPORT "KCE-1 CRITICAL HEAT FLUX CORRELATION FOR PLUS7 THERMAL DESIGN" DATE: March 30, 2017

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