

June 25, 2014

Mr. John W. Stetkar, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: CREDIT FOR CONTAINMENT ACCIDENT PRESSURE TO ENSURE  
OPERATION OF U.S. ADVANCED PRESSURIZED WATER REACTOR  
EMERGENCY CORE COOLING SYSTEM PUMPS

Dear Mr. Stetkar:

I am responding to your letter dated April 21, 2014.<sup>1</sup> The U.S. Nuclear Regulatory Commission (NRC) staff understands the position of the Advisory Committee on Reactor Safeguards (ACRS) regarding the use of containment accident pressure (CAP) in the emergency core cooling system pump net positive suction head (NPSH) evaluation.

The NRC staff recognizes that its February 24, 2014,<sup>2</sup> response to the ACRS does not resolve the Committee's concerns regarding the use of CAP for the U.S. Advanced Pressurized Water Reactor (US-APWR). However, the staff views that limited CAP credit, as proposed by the applicant, preserves the use of successive compensatory measures to prevent accidents or mitigate damage consistent with the principle of defense-in-depth. Given the important role that containment integrity plays in maintaining the defense-in-depth concept, the staff proposes to attempt to reach a common understanding with the ACRS on how to demonstrate acceptable results.

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<sup>1</sup> This letter can be found in the Agencywide Documents Access and Management System (ADAMS) at Accession Number [ML14112A358](#).

<sup>2</sup> ADAMS Package Accession No. [ML13365A056](#).

J. Stetkar

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The NRC staff appreciates the comments and recommendations provided by ACRS and would like to discuss further the role of additional defense-in-depth measures or additional analysis as they relate to achieving an appropriate balance of prevention and mitigation for new reactor designs. The staff will work with the ACRS to schedule this interaction.

Sincerely,

*/RA/*

Mark A. Satorius  
Executive Director  
for Operations

Docket No.: 52-021

cc: Chairman Macfarlane  
Commissioner Svinicki  
Commissioner Apostolakis  
Commissioner Magwood  
Commissioner Ostendorff  
SECY

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