

November 19, 2015

Doug E. Lee  
Vice President of NSSS Technology  
BWXT mPower, Inc.  
109 Ramsey Place  
Lynchburg, VA 24501

SUBJECT: SUSPENSION OF REVIEW OF THE BABCOCK & WILCOX TOPICAL REPORT  
R003-03-002106, "CORE NUCLEAR DESIGN CODES AND METHODS  
QUALIFICATION" (PROJ0776)

Dear Mr. Lee:

On April 28, 2009, Babcock & Wilcox (B&W) nuclear energy notified the U.S. Nuclear Regulatory Commission (NRC) of their intent to submit an application for the Design Certification of the B&W mPower reactor in accordance with the process defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52. On August 31, 2010, B&W submitted, "Core Nuclear Design Codes and Methods Qualification," topical report (TR) to the NRC staff (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102450302). The purpose of the TR was to seek NRC staff approval for the use of codes and nuclear computational methodology to be used for design calculations for the mPower reactor core.

In a February 8, 2013, letter, B&W mPower Inc., stated an intent to submit a design certification in the third quarter of calendar year 2014 for the mPower™ reactor design. However, in April 2014, B&W publically announced a restructuring of the small modular reactor program. In that restructuring, B&W stated that without the ability to secure significant additional investors or customers to provide the financial support necessary to develop and deploy mPower reactors, the current development pace would be slowed. B&W mPower, now BWXT mPower, Inc., has orally notified the NRC staff of their intent to delay submittal of the mPower design certification application, but has not selected a new date. While the NRC understands that BWXT mPower, Inc., is continuing design efforts on the mPower reactor, the NRC does not have documentation of BWXT mPower, Inc.'s future plans or intent for an mPower application submittal.

As part of the NRC review, the NRC staff planned to modify its Purdue Advanced Reactor Core Simulator (PARCS) computer code to perform confirmatory calculations that are necessary to support any future finding of acceptability. The code modifications for application to the mPower design are a significant resource investment. Given the uncertainty as to when the BWXT mPower, Inc. design certification application will be submitted, the NRC is suspending the review of this TR. When BWXT mPower, Inc.'s plans for development and submittal of a design certification application are better known, the NRC staff will evaluate restarting this review. This topical report review suspension was discussed with your staff in September 2015.

D. Lee

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If there are any questions about this decision, please contact Demetrius Murray at 301-415-7646 or [Demetrius.Murray@nrc.gov](mailto:Demetrius.Murray@nrc.gov).

Sincerely,

*/RA/*

Mark Tonacci, Chief  
Licensing Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Project No.: PROJ0776

D. Lee

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If there are any questions about this decision, please contact Demetrius Murray at 301-415-7646 or [Demetrius.Murray@nrc.gov](mailto:Demetrius.Murray@nrc.gov).

Sincerely,

*/RA/*

Mark Tonacci, Chief  
Licensing Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

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