



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

November 23, 2021

MEMORANDUM TO: Angela Buford, Chief  
Vessels and Internals Branch  
Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation

FROM: Brian Smith, Director  
Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation

SUBJECT: DECISION REGARDING TECHNICAL ASSESSMENT OF  
NONCONSERVATIVE FRACTURE TOUGHNESS IN BWRVIP-  
100 REV 1-A

In accordance with the Office of Nuclear Reactor Regulation (NRR) Instruction LIC-504, Revision 5, "Integrated Risk-Informed Decision-Making Process for Emergent Issues," dated March 4, 2020, the staff of the U.S. Nuclear Regulatory Commission (NRC) performed a risk-informed evaluation of the potential safety significance of a fracture toughness nonconservatism in BWRVIP-100 Rev. 1-A ([ML21312A544](#)) transmitted via memorandum dated November 17, 2021 ([ML21312A545](#)).

I acknowledge the NRC staff's analysis of the safety implication of the nonconservative fracture toughness values in BWRVIP-100 Rev. 1-A and the conclusion that the safety significance of the nonconservative fracture toughness in BWRVIP-100 Rev. 1-A is low for U.S. plants.

The staff recommended that the NRC leverage inspection programs to target licensee corrective actions to address the BWRVIP-100 Rev. 1-A nonconservatism. The basis for the staff's recommendation was that it provides appropriate oversight of licensee corrective actions taking into consideration the low safety significance of the issue. The staff determined that inspection activities within the Reactor Oversight Process will provide information to the staff about plant-specific reactor vessel internals inspection programs and will serve as an independent check on licensee activities related to the BWRVIP-100 Rev. 1-A nonconservatism. I hereby agree with the staff's recommendation.

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