



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

April 16, 2018

Mr. William R. Gideon  
Site Vice President  
Brunswick Steam Electric Plant  
8470 River Rd. SE (M/C BNP001)  
Southport, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT UNITS 1 AND 2 – STAFF  
ASSESSMENT OF RESPONSE TO 10 CFR 50.54(f) INFORMATION REQUEST  
FLOOD-CAUSING MECHANISM REEVALUATION (EPID NOS.  
000495/05000325/L-2015-JLD-0007 AND 000495/05000324/L-2015-JLD-0008)

Dear Mr. Gideon:

By letter dated March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information under Title 10 of the *Code of Federal Regulations*, Section 50.54(f) (hereafter referred to as the 50.54(f) letter). The request was issued as part of implementing lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant. Enclosure 2 to the 50.54(f) letter requested that licensees reevaluate flood-causing mechanisms using present-day methodologies and guidance. By letter dated March 11, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15079A385, non-public), Duke Energy Progress, LLC (Duke, the licensee) responded to this request for Brunswick Steam Electric Plant, Units 1 and 2 (Brunswick).

By letter dated March 16, 2017 (ADAMS Accession No. ML17072A364), the NRC staff sent the licensee a summary of the staff's review of Brunswick's reevaluated flood-causing mechanisms. The enclosed staff assessment provides the documentation supporting the NRC staff's conclusions summarized in the letter. As stated in the letter, the reevaluated flood hazard results for the local intense precipitation, streams and rivers, failure of dams and onsite water control/storage structures, storm surge, and tsunami flood-causing mechanisms were not bounded by the current design basis. In order to complete its response to Enclosure 2 to the 50.54(f) letter, the licensee is expected to submit a focused evaluation or an integrated assessment in order to address these reevaluated flood hazards, as discussed in COMSECY-15-0019, "Closure Plan for the Reevaluation of Flooding Hazard for Operating Nuclear Power Plants," and Japan Lessons-Learned Division (JLD) Interim Staff Guidance (ISG) JLD-ISG-2016-01, "Guidance for Activities Related to Near-Term Task Force Recommendation 2.1, Flooding Hazard Reevaluation; Focused Evaluation and Integrated Assessment." This letter closes out the NRC's efforts associated with CAC Nos. MF6104 and MF6105.

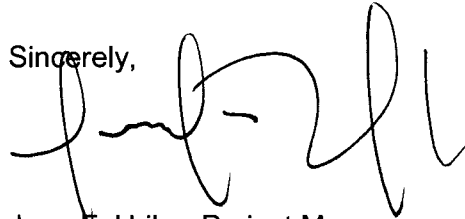
**The Enclosure transmitted herewith contains Security-Related Information. When separated from the Enclosure, this document is decontrolled.**

W. Gideon

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If you have any questions, please contact me at (301) 415-3809 or by e-mail at Juan.Uribe@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Juan F. Uribe', written over a light blue horizontal line.

Juan F. Uribe, Project Manager  
Beyond-Design-Basis Management Branch  
Division of Licensing Projects  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325 and 50-324

Enclosure:

Staff Assessment of Flood Hazard  
Reevaluation Report for Brunswick  
(Non-public, Security Related)

cc w/o encl: Distribution via Listserv

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DATED April 16, 2018

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