



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-18-048

April 2, 2018

10 CFR 50.4

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Sequoyah Nuclear Plant, Units 1 and 2
Renewed Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Units 1 and 2
Facility Operating License Nos. NPF-90 and NPF-96
NRC Docket Nos. 50-390 and 50-391

Subject: **Status Regarding the Improved Flood Mitigation System Project**

- References:
1. Letter from TVA to NRC, "Notification of Change in Completion Schedule Regarding the Improved Flood Mitigation System Project," dated July 15, 2016 (ML16197A350)
 2. Letter from TVA to NRC, "Request for Review and Approval of Topical Report TVA-NPG-AWA16, TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041," dated September 20, 2016 (ML16264A454)
 3. Letter from TVA to NRC, "Status Regarding the Improved Flood Mitigation System Project," dated September 29, 2017 (ML17272A979)

By letter dated July 15, 2016, Tennessee Valley Authority (TVA) informed the Nuclear Regulatory Commission (NRC) of a change in the specified field implementation completion schedule to install improved flood mode mitigation systems (FMMS) at the Sequoyah Nuclear Plant (SQN), Units 1 and 2, and the Watts Bar Nuclear Plant (WBN), Units 1 and 2 (Reference 1). The change in the implementation schedule was based on the ongoing TVA project to upgrade precipitation models and rerun hydraulic models to determine new probable maximum flood levels for both design basis and beyond-design-basis purposes.

In a letter dated September 29, 2017 (Reference 3), TVA committed to provide a written update regarding the reevaluated SQN and WBN flood levels using updated precipitation data. The purpose of this letter is to provide that update.


TVA completed an updated precipitation calculation that includes updated data (storm and dew point), meteorological science, technology, weather radar, Geographic Information System (GIS) tools, and treatment of topography. The results reflect a potential precipitation volume/input decrease from the values reflected in the current licensing basis and reevaluated flood hazards for SQN and WBN. Preliminary results from the hydraulic models used to establish resulting changes in flood levels at the SQN and WBN sites reflect potential decreases in analyzed flood levels at both sites.

The updated precipitation calculation was submitted to NRC for review by letter dated September 20, 2016 (Reference 2). Based on the continuing technical discussions regarding some aspects of the precipitation calculation methodology, as well as input assumptions and data, a revision to the calculation is being made to resolve several NRC areas of concern. Subsequent to the revision being completed and NRC acceptance, the newly revised precipitation data will be used as input into TVA's hydraulic models to determine the resulting flood levels at the SQN and WBN sites.

TVA will provide a written update regarding the reevaluated SQN and WBN flood levels using the revised precipitation data by September 30, 2018.

The enclosure to this letter provides the one new regulatory commitment contained in this letter. If additional information is needed regarding this update, please contact Russell Thompson at (423) 751-2567.

Respectfully,



J. W. Shea
Vice President, Nuclear Regulatory Affairs and Support Services

Enclosure

cc (Enclosure):

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRC Senior Resident Inspector - Watts Bar Nuclear Plant
NRR Director - NRC Headquarters
NRR Project Manager - Sequoyah Nuclear Plant
NRR Project Manager - Watts Bar Nuclear Plant

ENCLOSURE
COMMITMENT

1. TVA will provide a written update regarding the reevaluated SQN and WBN flood levels using the revised precipitation data by September 30, 2018.