



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

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CNL-16-136

September 20, 2016

10 CFR 50.4

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

Browns Ferry Nuclear Plant, Units 1, 2, and 3  
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68  
NRC Docket Nos. 50-259, 50-260, and 50-296

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: Request for Review and Approval of Topical Report TVA-NPG-AWA16, “TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ00000201600041”**

Reference: Summary of April 4, 2016, Public Meeting With TVA Regarding Hydrology-Related Licensing Actions, Sequoyah Nuclear Plant, Units 1 and 2 (CAC Nos. ME9238 AND ME9239), dated May 2, 2016 (ML16117A551)

Tennessee Valley Authority (TVA) is submitting topical report TVA-NPG-AWA16, “TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ00000201600041” for review and approval. Approval of this Topical Report is requested to support Probable Maximum Flood calculations and associated License Amendment Requests for Sequoyah Nuclear Plant, Units 1 and 2, and Watts Bar Nuclear Plant, Units 1 and 2, as discussed in the Reference. This topical report does not contain proprietary information.

This topical report describes the work performed to calculate the Probable Maximum Precipitation for any location within the overall Tennessee Valley Authority (TVA) basin and Local Intense Precipitation (LIP) at the BFN, SQN, and WBN sites. The report outlines the process, data, and methods used to analyze storms and develop the PMP values. Results and background data are provided and discussed, along with comparisons to previous PMP work in the region. Relevant background data, input calculation, and reference materials are included in various appendices.

Enclosed is one copy of topical report TVA-NPG-AWA16 and one compact disk containing a portable document format (PDF) version of this letter and the topical report.

There are no regulatory commitments associated with this submittal. Please address any questions regarding this request to Russell Thompson at 423-751-2567.

Respectfully,

J. W. Shea  
Vice President, Nuclear Licensing

Enclosure: TVA-NPG-AWA16, "TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041"

cc (Enclosure):

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

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JJV:RRT

bcc (w/o Enclosure):

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**Enclosure 1**

**TVA-NPG-AWA16**

**“TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation  
Analysis, Calculation CDQ0000002016000041”**