

This letter is decontrolled when separated from Enclosure 1, Section B, Appendix H, Attachment 1



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

CNL-19-040

May 21, 2019

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: Submittal of Topical Report TVA-NPG-AWA16-A, "TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041, Revision 1" (EPID L-2016-TOP-0011)**

- References:
1. TVA Letter 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)
  2. Electronic Mail from NRC to TVA, "Request For Additional Information Related to TVA Fleet Topical Report TVA-NPG-AWA16 (EPIC: L-2016-TOP-0011)," dated February 23, 2018 (ML18057A637)
  3. TVA Letter to NRC, "Tennessee Valley Authority Response to NRC Request for Additional Information Related to Topical Report TVA NPG-AWA16, 'TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041'," dated April 19, 2018 (ML18117A225)

DO3D  
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NRR

4. TVA Letter 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', Revision 1," dated June 22, 2018 (ML18192A510)
5. TVA Letter to NRC, "Topical Report TVA-NPG-AWA16, 'TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041,' Revision 1, Supplemental Information," dated September 6, 2018 (ML18262A091)
6. NRC Letter to TVA, "Final Safety Evaluation for Tennessee Valley Authority Topical Report "TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis Calculation CDQ0000002016000041,' Rev. 1 (EPID L-2016-TOP-0011)," dated March 18, 2019 (ML19010A212)

By letter dated September 20, 2016 (Reference 1), Tennessee Valley Authority (TVA) submitted topical report TVA-NPG-AWA16, "TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041," for review and approval. Approval of the Topical Report was requested to support Probable Maximum Flood calculations and associated with planned License Amendment Requests for Sequoyah Nuclear Plant (SQN), Units 1 and 2, and Watts Bar Nuclear Plant (WBN), Units 1 and 2, and a potential License Amendment Request for Browns Ferry Nuclear Plant, Units 1, 2, and 3.

By email dated February 23, 2018 (Reference 2), NRC forwarded a Request for Additional Information (RAI) associated with the NRC review of the topical report. TVA responded to the NRC RAI by letter dated April 19, 2018 (Reference 3). As described in the Enclosure of Reference 3, a revision to Topical Report TVA-NPG-AWA16 was required to fully resolve the RAIs associated with dew point climatology.

Topical Report TVA-NPG-AWA16, Revision 1, was submitted for NRC review and approval by letter dated June 22, 2018 (Reference 4). Supplemental information to support the review of Topical Report TVA-NPG-AWA16, Revision 1, was provided by letter dated September 6, 2018 (Reference 5).

By letter dated March 18, 2019 (Reference 6), NRC issued its final safety evaluation for Topical Report TVA-NPG-AWA16, Revision 1, documenting the staff conclusion that the topical report provides reasonable estimates of the probable maximum precipitation that can have an impact on the operating nuclear plants in the TVA basin.

The NRC also requested that TVA submit an approved version of the topical report within three months of TVA's receipt of the letter. Accordingly, Enclosure 1 of this letter provides Topical Report TVA-NPG-AWA16-A, 'TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041,' Revision 1. As requested, the approved topical report incorporates the March 18, 2019, NRC letter and its enclosures. The approved topical report also provides historical review correspondence, including NRC

requests for additional information and TVA's responses (References 1 through 5). This information is provided at the end of Enclosure 1. A table of contents is provided after the topical report cover page to assist in locating the referenced historical documents.

Applied Weather Associates (AWA) considers portions of the data supporting the topical report (Enclosure 1, Appendix H, Attachment 1) to be proprietary and therefore exempt from public disclosure pursuant to 10 CFR 2.390. An affidavit for withholding information, executed by AWA, is provided in Enclosure 2. Therefore, on behalf of AWA, TVA requests that Enclosure 1, Section B, Appendix H, Attachment 1 be withheld from public disclosure in accordance with the AWA affidavit and the provisions of 10 CFR 2.390.

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

Respectfully,

E. K. Henderson  
Director, Nuclear Regulatory Affairs

Enclosures:

1. TVA-NPG-AWA16-A, "TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis, Calculation CDQ0000002016000041," Revision 1  
[Includes two disks with data for Section B, Appendix H]
2. Affidavit - Applied Weather Associates

cc (Enclosures):

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  
NRR Senior Resident Inspector - Watts Bar Nuclear Plant  
NRR Project Manager - Watts Bar Nuclear Plant

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bcc (w/o Enclosures):

S. M. Bono  
M. A. Brown  
C. C. Chandler  
D. M. Czufin  
S. M. Douglas  
C. D. Dunn  
K. D. Dutton  
E. K. Henderson  
J. M. Hodge  
D. L. Hughes  
K. D. Hulvey  
S. W. Hunnewell  
B. A. Jenkins  
J. T. Johnson  
T. B. Marshall  
E. C. Meisner  
J. L. Paul  
W. K. Paulhardt  
J. T. Polickoski  
M. M. Rasmussen  
T. S. Rausch  
J. W. Shea  
W. P. Trombley  
A. L. Williams  
ECM

**Enclosure 2**

**Affidavit – Applied Weather Associates**

## AFFIDAVIT

STATE OF COLORADO     )  
                                      ) ss.  
COUNTY OF EL PASO     )

1.       My name is William D. Kappel. I am President and Chief Meteorologist, for Applied Weather Associates and as such I am authorized to execute this Affidavit.

2.       I am familiar with the criteria applied by Applied Weather Associates to determine whether certain Applied Weather Associates information is proprietary. I am familiar with the policies established by Applied Weather Associates to ensure the proper application of these criteria.

3.       I am familiar with the Applied Weather Associates information contained in the report  
" TVA Overall Basin Probable Maximum Precipitation and Local Intense Precipitation Analysis" dated June 2018 and referred to herein as "Document." Information regarding the SPAS Hourly Rainfall ASCII Grids and dew point climatology ASCII grids provided as electronic files to supplement this Document has been classified by Applied Weather Associates as proprietary in accordance with the policies established by Applied Weather Associates for the control and protection of proprietary and confidential information.

4.       This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by Applied Weather Associates and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5.       This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information."

6. The following criteria are customarily applied by Applied Weather Associates to determine whether information should be classified as proprietary:

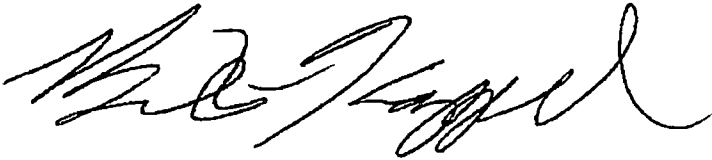
- (a) The information reveals details of Applied Weather Associates' research and development processes or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for Framatome.
- (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for Applied Weather Associates in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by Framatome, would be helpful to competitors to Framatome, and would likely cause substantial harm to the competitive position of Applied Weather Associates.

The information in the Document is considered proprietary for the reasons set forth in paragraphs 6(b), 6(d) and 6(e) above.

7. In accordance with Applied Weather Associates' policies governing the protection and control of information, proprietary information contained in this Document have been made available, on a limited basis, to others outside Applied Weather Associates only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. Applied Weather Associates policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.



SUBSCRIBED before me this 18  
day of June, 2018.

