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

CNL-14-157

September 25, 2014

10 CFR § 50.36(a)

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

Watts Bar Nuclear Plant, Unit 2
Facility Construction Permit No. CPPR-92
NRC Docket No. 50-391

Subject: **Watts Bar Nuclear Plant Unit 2 – Response to NRC Request for Additional Information Related to Technical Specification 3.7.1**

Reference: Electronic Mail from Michael Miernicki (NRC) to Gordon Arent (TVA), "RAI WBN2 TS Rev I - SBPB," dated August 19, 2014

The purpose of this letter is to respond to the request for additional information (RAI) related to Technical Specification 3.7.1 provided in the referenced electronic mail from the Nuclear Regulatory Commission (NRC) to the Tennessee Valley Authority (TVA). The enclosure provides TVA's response to the NRC request.

There are no regulatory commitments in this letter. If you have any questions, please contact Gordon Arent at (423) 365-2004.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 25th day of September 2014.

Respectfully,

J. W. Shea
Vice President, Nuclear Licensing

Enclosure: Response to NRC Request for Additional Information - Watts Bar Nuclear Plant Unit 2 - Technical Specification 3.7.1

cc: See Page 2

cc (Enclosure):

NRC Regional Administrator – Region II
NRC Senior Resident Inspector – Watts Bar Nuclear Plant, Unit 2

ENCLOSURE

TENNESSEE VALLEY AUTHORITY

WATTS BAR NUCLEAR PLANT, UNIT 2

Response to NRC Request for Additional Information - Watts Bar Nuclear Plant Unit 2 - Technical Specification 3.7.1

NRC Request

BACKGROUND:

By letter dated June 16, 2014, Tennessee Valley Authority [TVA] (the applicant) submitted developmental Revision I of the Watts Bar Unit 2 Technical Specifications (Agencywide Documents Access and Management System [ADAMS] Accession No. ML14169A525) for review and licensing by the U.S. Nuclear Regulatory Commission (NRC).

Watts Bar Unit 2, Technical Specifications Bases Section 3.7.1, "Main Steam Safety Valves (MSSVs)", Limiting Condition for Operation, (LCO) states that the accident analysis requires that five MSSVs per steam generator be OPERABLE to provide overpressure protection for design basis transients occurring at 102% reactor thermal power (RTP). The LCO Applicability requires that five MSSVs per steam generator be OPERABLE in compliance with Reference 2 and the DBA analysis.

Watts Bar Unit 1, Technical Specifications Bases Section 3.7.1, "Main Steam Safety Valves (MSSVs)", LCO states that the accident analysis requires that five MSSVs per steam generator be OPERABLE to provide overpressure protection for design basis transients occurring at 100.6% RTP. The LCO applicability requires that five MSSVs per steam generator be OPERABLE in compliance with Reference 2 and the DBA analysis.

ISSUE:

Description of MSSVs overpressure protection for design basis transients related to RTP between Watts Bar Units 1 and 2 are different.

RAI:

Clarify why there is a difference between Watts Bar Unit 1 and Watts Bar Unit 2 with respect to overpressure protection and RTP.

TVA Response

The difference between Watts Bar Unit 1 and Watts Bar Unit 2 with respect to overpressure protection and RTP exists because the Watts Bar Nuclear Plant (WBN) Unit 1 Operating License was amended to increase the rated thermal power (RTP) by 1.4% from 3411 Megawatt thermal (MW_{th}) to 3459 MW_{th}. This change was based on improvements resulting from installation of a Caldon Leading Edge Flow Meter (LEFM), and was approved as Amendment 31 to the WBN Unit 1 Technical Specifications, issued January 19, 2001 (ML010260074).

The LEFM improvement is not included as part of the WBN Unit 2 License application. Therefore, the basis for the WBN Unit 2 Operating License Application is the same as Unit 1 before Amendment 31, which is why there is a difference between the Technical Specification Bases descriptions of MSSV overpressure protection for design basis transients related to RTP between Watts Bar Units 1 and 2.

References

NRC Letter to TVA, "Watts Bar Nuclear Plant, Unit 1 - Issuance of Amendment Regarding Increase of Reactor Power to 3459 Megawatts Thermal (TAC NO. MA9152)", dated January 19, 2001 [ML010260074]

Letter from TVA to NRC, "Watts Bar Nuclear Plant Unit 2 - Submittal of Developmental Revision I of the Unit 2 Technical Specification & Technical Specification Bases and Developmental Revision D of the Unit 2 Technical Requirements Manual and Technical Requirements Manual Bases," dated June 16, 2014 [ML14169A525]