



Tennessee Valley Authority  
1101 Market Street, LP 3R  
Chattanooga, Tennessee 37402-2801

R. M. Krich  
Vice President  
Nuclear Licensing

February 25, 2011

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  
Facility Operating License Nos. DPR-77 and DPR-79  
NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Unit 1  
Facility Operating License No. NPF-90  
NRC Docket No. 50-390

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

Subject: **Request for Extension of Time to Respond to Non-Cited Violations 05000327, 05000328/2010005-03, "Failure to Use Worst Case 6900 VAC Bus Voltage in Design Calculations" and 05000390/2010005-03, "Failure to Use Worst Case 6900 VAC Bus Voltage in Design Calculations"**

- References:
- 1) Letter from NRC (Eugene F. Guthrie) to TVA (R. M. Krich), "Sequoyah Nuclear Plant - NRC Integrated Inspection Report 05000327/2010005, 05000328/2010005," dated January 28, 2011
  - 2) Letter from NRC (Eugene F. Guthrie) to TVA (R. M. Krich), "Watts Bar Nuclear Plant - NRC Integrated Inspection Report 05000390/2010005," dated January 28, 2011
  - 3) NUREG-0847, Supplement 22, "Safety Evaluation Report Related to the Operation of Watts Bar Nuclear Plant, Unit 2, Docket No. 50-391," published February 2011

In References 1 and 2, the NRC issued Non-Cited Violations (NCVs) 05000327, 05000328/2010005-03, "Failure to Use Worst Case 6900 VAC Bus Voltage

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In Design Calculations" and 05000390/2010005-03, "Failure to Use Worst Case 6900 VAC Bus Voltage in Design Calculations," regarding Sequoyah Nuclear Plant (SQN), Units 1 and 2 and Watts Bar Nuclear Plant (WBN), Unit 1, respectively. The NCVs addressed issues regarding the design basis of the degraded voltage protection equipment at both sites. In the cover letter for both References 1 and 2, the NRC stated:

*If you contest any NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector . . .*

Based on the issuance date for References 1 and 2, the 30-day response date to potentially contest the NCVs is February 27, 2011.

In Reference 3, the NRC issued a supplemental safety evaluation report with respect to the application filed by the Tennessee Valley Authority (TVA) for a license to operate WBN, Unit 2. In Section 8.3.1.2 of Reference 3, the NRC stated:

*TVA should confirm that all safety-related equipment (in addition to the Class 1E motors) will have adequate starting and running voltage at the most limiting safety-related components (such as motor-operated valves (MOVs), contactors, solenoid valves or relays) at the DVR setpoint dropout setting. TVA should also confirm that (1) the motor-starting transient studies are based on the dropout voltage value of DVR and time delay, (2) the steady-state voltage drop studies are carried out by maximizing running loads on the Class 1 E distribution system (bounding combination of safety systems loads), with the voltage at 6.9-kV Class 1E buses (monitored by the DVRs) at or just above the DVR dropout setting, and (3) the DVR settings do not credit any equipment operation (such as LTC transformers) upstream of the 6.9-kV Class 1E buses. TVA should also confirm that the final technical specifications (TSs) are properly derived from these analytical values for the degraded voltage settings. This is Open Item 30 (Appendix HH).*

TVA has conducted preliminary reviews of the concerns and issues regarding the design of degraded voltage protection at SQN, Units 1 and 2, WBN, Unit 1, and WBN, Unit 2 expressed by the NRC in References 1, 2, and 3. The design of the degraded voltage protection systems at SQN and WBN are established on the same design basis and with identical design assumptions for all four units. TVA notes that the NRC's issues regarding SQN, Units 1 and 2 and WBN, Unit 1 are raised via the enforcement related provisions of the Reactor Oversight Process while a similar or identical issue has been raised by the NRC regarding WBN, Unit 2 in the operating license application review process.

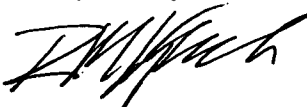
TVA is firmly committed to fully understanding and resolving NRC's concerns regarding degraded voltage protection. However, TVA's position is that the issues should be resolved in manner that provides for a high degree of technical and regulatory consistency across both the enforcement process employed by the NRC on SQN, Units 1 and 2 and WBN, Unit 1 and the licensing process underway for WBN, Unit 2.

TVA's preliminary review of both the References 1 and 2 NCVs and the Reference 3 open items on degraded voltage has identified several concerns that warrant further engagement with the NRC staff. Specifically, neither References 1 and 2 nor Reference 3 discuss how the NRC staff has determined that the well documented SQN, Units 1 and 2 and WBN, Unit 1 licensing basis with regard to analyzing running and starting voltage are no longer adequate as a close reading of the Referenced documents would imply. Further, TVA has concerns regarding the implied expectation in the References 1 and 2 NCVs that Technical Specification values should be used as inputs to design calculations which are themselves the foundation for the Technical Specification values. TVA's concerns are based on its review of the NCVs and Open Item in References 1, 2, and 3 and after participating in telephone inspection exit meetings for both the SQN, Units 1 and 2 and WBN, Unit 1 NCVs.

TVA has placed the NCVs in References 1 and 2 into the corrective action program. TVA currently plans to respond to the Reference 3 Open Items by March 31, 2011. In order to ensure consistent resolution of NRC's underlying concerns regarding degraded voltage protection at all four affected TVA units, TVA requests that the response date for potential challenge of the References 1 and 2 NCVs be extended to March 31, 2011. To facilitate timely resolution of the issues, TVA will propose a date and time to meet with the NRC in the near future.

If you have any questions in this matter, please contact me at 423-751-3628.

Respectfully,



R. M. Krich

cc:

NRC Director, Office of Enforcement  
NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Sequoyah Nuclear Plant  
NRC Senior Resident Inspector - Watts Bar Nuclear Plant, Unit 1  
NRC Senior Resident Inspector - Watts Bar Nuclear Plant, Unit 2