



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

October 9, 2009

10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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

Subject: **Response to Request for Additional Information Concerning
Technical Specifications Change 07-05 – Upgrade of Emergency
Core Cooling System Requirements
(TAC No. ME1115 and ME1116)**

- References:
1. Letter from TVA to NRC dated April 21, 2009, "Sequoyah Nuclear Plant (SQN) - Units 1 and 2 - Technical Specification (TS) Change No. 07-05, 'Emergency Core Cooling System (ECCS)'" [ML091120193]
 2. Letter from NRC to TVA dated October 2, 2009, "Sequoyah Nuclear Plant, Units 1 and 2 - Request for Additional Information Regarding the Upgrade of Emergency Core Cooling System Requirements per NUREG-1431 (TAC No. ME1115 and ME1116)" [ML092720072]

By letter dated April 21, 2009 (Reference 1), Tennessee Valley Authority (TVA) submitted a license amendment application to NRC to revise the Sequoyah Nuclear Plant (SQN) Units 1 and 2 Technical Specifications (TSs) to upgrade the emergency core cooling system TS. By letter dated October 2, 2009 (Reference 2), the NRC requested additional information be submitted to support their review of the license amendment application. The enclosure provides the TVA response to the NRC request for additional information provided in Reference 2.

TVA has determined that the additional information provided by this letter does not affect the no significant hazards considerations associated with the proposed TS changes. The proposed TS changes still qualify for a categorical exclusion from environmental review pursuant to the provisions of 10 CFR 51.22(c)(9).

ADD
NRR

U.S. Nuclear Regulatory Commission
Page 2
October 9, 2009

There are no new regulatory commitments associated with this submittal.

If you have any questions about this change, please contact Fred Mashburn at
(423) 751-8817.

I declare under penalty of perjury that the foregoing is true and correct. Executed on
the 9th day of October, 2009.

Respectfully,



R. M. Krich
Vice President
Nuclear Licensing

Enclosure: Response to NRC Request for Additional Information Regarding the
Upgrade of Emergency Core Cooling System Requirements per
NUREG-1431

cc (Enclosure):

NRC Regional Administrator – Region II

NRC Senior Resident Inspector - Sequoyah Nuclear Plant

Director, Division of Radiological Health - State of Tennessee

ENCLOSURE

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION REGARDING THE UPGRADE OF EMERGENCY CORE COOLING SYSTEM REQUIREMENTS PER NUREG-1431

NRC Question 1

On page E-11 of the licensee's letter dated April 21, 2009, it is noted that a new action b of TS 3.5.3 is less restrictive than current requirements because it will allow an extra 3 hours for the plant to be in Mode 4 when the required ECCS centrifugal charging pump is inoperable. There is no technical justification provided for this extra time.

1. *Provide justification for the extra 3 hours for the plant to be in Mode 4 when the required ECCS centrifugal charging pump is inoperable.*

TVA Response

The justification for the extra time for the unit to transition from hot shutdown (Mode 4) to cold shutdown (Mode 5) when the required emergency core cooling system (ECCS) centrifugal charging pump is inoperable is as follows.

In Mode 4, current Technical Specification (TS) 3.5.3 Action a, when no ECCS subsystem is operable because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, allows one hour to restore at least one ECCS subsystem or requires the unit to be placed in cold shutdown (Mode 5) in the next 20 hours. The proposed TS 3.5.3 Action b allows one hour to restore the required ECCS centrifugal charging subsystem to operable status or requires the unit to be placed in cold shutdown (Mode 5) within 24 hours. This changes the current TS by extending the shutdown completion time from 20 hours to 24 hours. The purpose of the shutdown actions of current TS 3.5.3 Action a is to require the unit to be placed in a mode in which the limiting condition for operation is no longer applicable. This change is acceptable because the completion time is consistent with safe operation under the specified condition taking into consideration the need to provide a reasonable time (that is based on operating experience) to reach cold shutdown (Mode 5) in an orderly manner without challenging unit systems or operators and the low probability of a design basis accident during the time period. This change is also consistent with current TS 3.0.3, which allows 24 hours for the unit to transition from hot shutdown (Mode 4) to cold shutdown (Mode 5). Additionally, this proposed change is consistent with the Improved Standard TS requirements for ECCS.