

Tennessee Valley Authority, Sequoyah Nuclear Plant, P.O. Box 2000, Soddy Daisy, Tennessee 37384

May 29, 2019

10 CFR 50.4 10 CFR 50.71(e)

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

> 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

Subject:

Revisions to the Sequoyah Nuclear Plant Units 1 and 2 Technical Requirements Manual

References:

- 1. NRC Letter to TVA, "Issuance of Exemption to 10 CFR [50.] 71(e)(4) for the Sequoyah Nuclear Plant, Units 1 and 2 (TAC Nos. MA0646 and MA0647)," dated March 9. 1998
- 2. TVA Letter to NRC, "Revisions to the Sequoyah Nuclear Plant Technical Requirements Manual," dated November 28, 2017

Pursuant to 10 CFR 50.71(e) and the Reference 1 letter, updates to the Sequoyah Nuclear Plant (SQN) Updated Final Safety Analysis Report (UFSAR) for both Units 1 and 2 are to be submitted within 180 days following each Unit 2 refueling outage, but not to exceed 24 months between successive revisions. The SQN Technical Requirements Manual (TRM) is incorporated by reference into the SQN UFSAR. This letter provides NRC updates to the TRM since the update provided in the Reference 2 letter. The last Unit 2 refueling outage ended on December 8, 2018, and as such these updates are required by June 6, 2019. The enclosure to this letter provides a description of the TRM revisions with attachments of the updated pages.

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There are no new regulatory commitments contained in this letter. If you have any questions, please contact Mr. Jonathan Johnson, SQN Licensing Manager, at (423) 843-8129.

I certify that I am duly authorized by TVA, and that, to the best of my knowledge and belief, the information contained herein accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to the Commission or prepared pursuant to Commission requirements.

Respectfully,

Matthew Rasmussen Site Vice President

Sequoyah Nuclear Plant

### Enclosure:

Description of Revisions for the Sequoyah Nuclear Plant (SQN) Units 1 and 2, Technical Requirements Manual (TRM)

### cc (Enclosure):

NRC Regional Administrator – Region II NRC Senior Resident Inspector – Sequoyah Nuclear Plant

### **ENCLOSURE**

# DESCRIPTION OF REVISIONS FOR THE SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2, TECHNICAL REQUIREMENTS MANUAL (TRM)

## **Technical Requirements Manual (TRM) Revisions**

TRM Revision 60 was approved on June 8, 2018, and implemented on June 15, 2018. The change revised Technical Requirement (TR) 8.7.5, "Heating, Ventilating, and Air Conditioning (HVAC) Maintenance Rule Equipment Risk Significant" Bases. Table 8.7.5-1 lists HVAC Equipment to be monitored for Maintenance Rule Unavailability in accordance with 10 CFR 50.65 "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The Bases describes this HVAC Equipment as "Risk Significant" and therefore in scope of the Maintenance Rule Program. However, some equipment has been identified as no longer "Risk Significant." The change to the Bases removes the description of "Risk Significant" equipment, yet continues to track HVAC Equipment unavailability, but specifies that Site Engineering will determine equipment unavailability times within scope the Maintenance Rule Program.

TRM Revision 61 was approved on February 21, 2019, and implemented on February 27, 2019. This revision changed TR 8.7.5 by deleting "6.9 kV" from the HVAC Equipment listed as "6.9 kV Shutdown Board Room Cooling Systems." The change was made to clarify that the Shutdown Board Room Cooling Systems provides cooling for both 480V and 6.9 kV shutdown board rooms.

#### Attachment:

Sequoyah Nuclear Plant, Technical Requirements Manual - Changed Pages

## **ATTACHMENT**

## SEQUOYAH NUCLEAR PLANT TECHNICAL REQUIREMENTS MANUAL CHANGED PAGES

# TRM Affected Pages

EPL-5

EPL-9

8.7.5-2

8.7.5-3

8.7.5-4

# SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 TECHNICAL REQUIREMENTS MANUAL

### EFFECTIVE PAGE LISTING

Page	Revision
8.7.2-3	10/23/15
8.7.3-1	10/23/15
8.7.3-2	10/23/15
8.7.3-3	10/23/15
8.7.3-4	10/23/15
8.7.3-5	10/23/15
8.7.3-6	10/23/15
8.7.3-7	10/23/15
8.7.3-8	10/23/15
8.7.3-9	10/23/15
8.7.3-10	10/23/15
8.7.3-11	10/23/15
8.7.3-12	10/23/15
8.7.3-13	10/23/15
8.7.3-14	10/23/15
8.7.4-1	10/23/15
8.7.4-2	10/23/15
8.7.4-3	10/23/15
8.7.5-1	10/23/15
8.7.5-2	02/21/19
8.7.5-3	06/08/18
8.7.5-4	02/21/19
8.7.6-1	10/23/15
8.7.6-2	10/23/15

# SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 TECHNICAL REQUIREMENTS MANUAL

# **REVISION LISTING**

Revision	Date
Revision 50	11/25/15
Revision 51	07/01/16
Revision 52	
Revision 53	
Revision 54	
Revision 55	
Revision 56	
Revision 57	
Revision 58	
	02/21/19

# Table 8.7.5-1 HVAC Maintenance Rule Equipment

	EQUIPMENT	COMPONENTS	APPLICABLE MODES
1.	Electrical Board Room Cooling, A Train	A Train chiller and air handling unit	ALL MODES
2.	Electric Board Room Cooling, B Train	B Train chiller and air handling unit	ALL MODES
3.	Shutdown Board Room Cooling, A Train	A Train chiller, chilled water system, and 1A and 2A air handling units	ALL MODES
4.	Shutdown Board Room Cooling, B Train	B Train chiller, chilled water system, and 1B and 2B air handling units	ALL MODES
5.	1A 480 V Electric Board Room Cooling	1A chiller, condensing and air handling units	ALL MODES
6.	1B 480 V Electric Board Room Cooling	1B chiller, condensing and air handling units	ALL MODES
7.	2A 480 V Electric Board Room Cooling	2A chiller, condensing and air handling units	ALL MODES
8.	2B 480 V Electric Board Room Cooling	2B chiller, condensing and air handling units	ALL MODES
9.	1A 480 V Transformer Room Ventilation	1A1-A, 1A2-A, 1A3-A, and 1A4-A exhaust fans	ALL MODES
10.	1B 480 V Transformer Room Ventilation	1B1-B, 1B2-B, and 1B3-B exhaust fans	ALL MODES
11.	2A 480 V Transformer Room Ventilation	2A1-A, 2A2-A, and 2A3-A exhaust fans	ALL MODES
12.	2B 480 V Transformer Room Ventilation	2B1-B, 2B2-B, 2B3-B, and 2B4-B exhaust fans	ALL MODES
13.	Thermal Barrier Booster Pump & Spent Fuel Pit Pump Cooler, A Train	A Train Cooler	MODES 1,2,3, and 4
14.	Thermal Barrier Booster Pump & Spent Fuel Pit Pump Cooler, B Train	B Train Cooler	MODES 1,2,3, and 4

#### 8.7 PLANT SYSTEMS

8.7.5 Heating, Ventilating, and Air Conditioning (HVAC) Maintenance Rule Equipment

### **BASES**

#### **BACKGROUND**

The HVAC equipment listed in Table 8.7.5-1 is required to be tracked for unavailability by Sequoyah's implementation of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The Maintenance Rule program requires that the time this equipment is Nonfunctional, be monitored, whether due to an unplanned failure or planned maintenance. The required FUNCTIONALITY of the HVAC equipment is commensurate with the required OPERABILITY of the equipment being cooled. Engineering will trend the unavailability of the equipment as required based on "Risk Significance" of the equipment. The final Maintenance Rule unavailability time will be determined by Engineering. The equipment listed in Table 8.7.5-1 has no Technical Specification LCO or other associated TRM contingency measures for FUNCTIONALITY. Therefore, this TRM was created to provide indication for the unavailability of this HVAC equipment, and to assist in the tracking and trending of the total unavailability time.

### APPLICABLE SAFETY ANALYSES

The design basis of this HVAC equipment is to maintain the temperature of the area, to which the associated equipment provides cooling, below the design basis limits as described in the Environmental Design Criteria SQN-DC-V-21.0.

This TRM is being implemented for tracking purposes only and there is no associated Safety Analysis affected or implemented by this change.

# TECHNICAL REQUIREMENT

This TR is being implemented to track the unavailability time of the associated HVAC equipment. This equipment is considered to be FUNCTIONAL when the individual components necessary to maintain the associated area temperature below the design required limits are FUNCTIONAL. These components include the chiller package, cooling coils, air handling unit, pumps, fan, dampers, instrumentation, and controls as applicable to the various systems.

BASES			
APPLICABILITY	Cooling for the Electric Board Rooms, Shutdown Board Rooms, 480 V Electric Board Rooms and ventilation to the 480 V Transformer Rooms is required for all MODES due to the commonality of the equipment served, requirements for accident mitigation, and the ability to cross tie the 480V board room cooling between Units 1 & 2. Cooling to the Thermal Barrier Booster Pump & Spent Fuel Pit Pump Area is only required in MODES 1, 2, 3, and 4 for the applicable Unit.		
CONTINGNECY MEASURES	With any of the equipment listed in Table 8.7.5-1 Nonfunctional, the corresponding TR for that Unit and Train of equipment shall be entered into the Operation narrative logs and LCO tracking logs for tracking the unavailability time.		
TECHNICAL REQUIREMENTS VERIFICATION	This TR is for tracking purposes only. There are no Technical Requirements Verification associated with this TR.		
REFERENCES	<ol> <li>NPG-SPP-03.4, "Maintenance Rule Performance Indicator Monitoring, Trending and Reporting - 10 CFR 50.65."</li> <li>TI-4, Maintenance Rule Performance Indicator Monitoring, Trending,</li> </ol>		