



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

CNL-18-054

April 11, 2018

10 CFR 50.4
10 CFR 50.90

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: Supplement to Sequoyah Nuclear Plant, Units 1 and 2 License Amendment Request to Modify Essential Raw Cooling Water Motor Control Center Breakers and to Revise the Updated Final Safety Analysis Report for Sequoyah Nuclear Plant Units 1 and 2 (SQN-TS-17-04)

Reference: TVA Letter to NRC, CNL-17-150, "Sequoyah Nuclear Plant, Units 1 and 2 License Amendment Request to Modify Essential Raw Cooling Water Motor Control Center Breakers and to Revise the Updated Final Safety Analysis Report Sequoyah Nuclear Plant Units 1 and 2 (SQN-TS-17-04)," dated March 9, 2018 (ML18071A349)

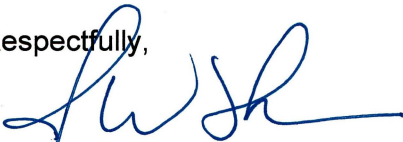
In the referenced letter, Tennessee Valley Authority (TVA) submitted a request for an amendment to Renewed Facility Operating License Nos. DPR-77 and DPR-79 for the Sequoyah Nuclear Plant (SQN), Units 1 and 2, respectively. The proposed change would modify Essential Raw Cooling Water (ERCW) Motor Control Center (MCC) Breakers and revise the Updated Final Safety Analysis Report for SQN Units 1 and 2 (SQN-TS-17-04).

Based on a verbal request from the Nuclear Regulatory Commission, the enclosure to this letter supplements the reference license amendment request by providing SQN-0-35W716-1 and 2, Single Line Diagrams for the 1A-A, 2A-A, 1B-B, and 2B-B ERCW MCCs.

This supplement does not change the no significant hazards consideration contained in the referenced letter. There are no new regulatory commitments made in this letter. Please address any questions regarding this request to Mr. Edward D. Schrull at (423) 751-3850.

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I declare under penalty of perjury that the foregoing is true and correct. Executed on this 11th day of April 2018.

Respectfully,


J. W. Shea
Vice President, Nuclear Regulatory Affairs and Support Services

Enclosure:

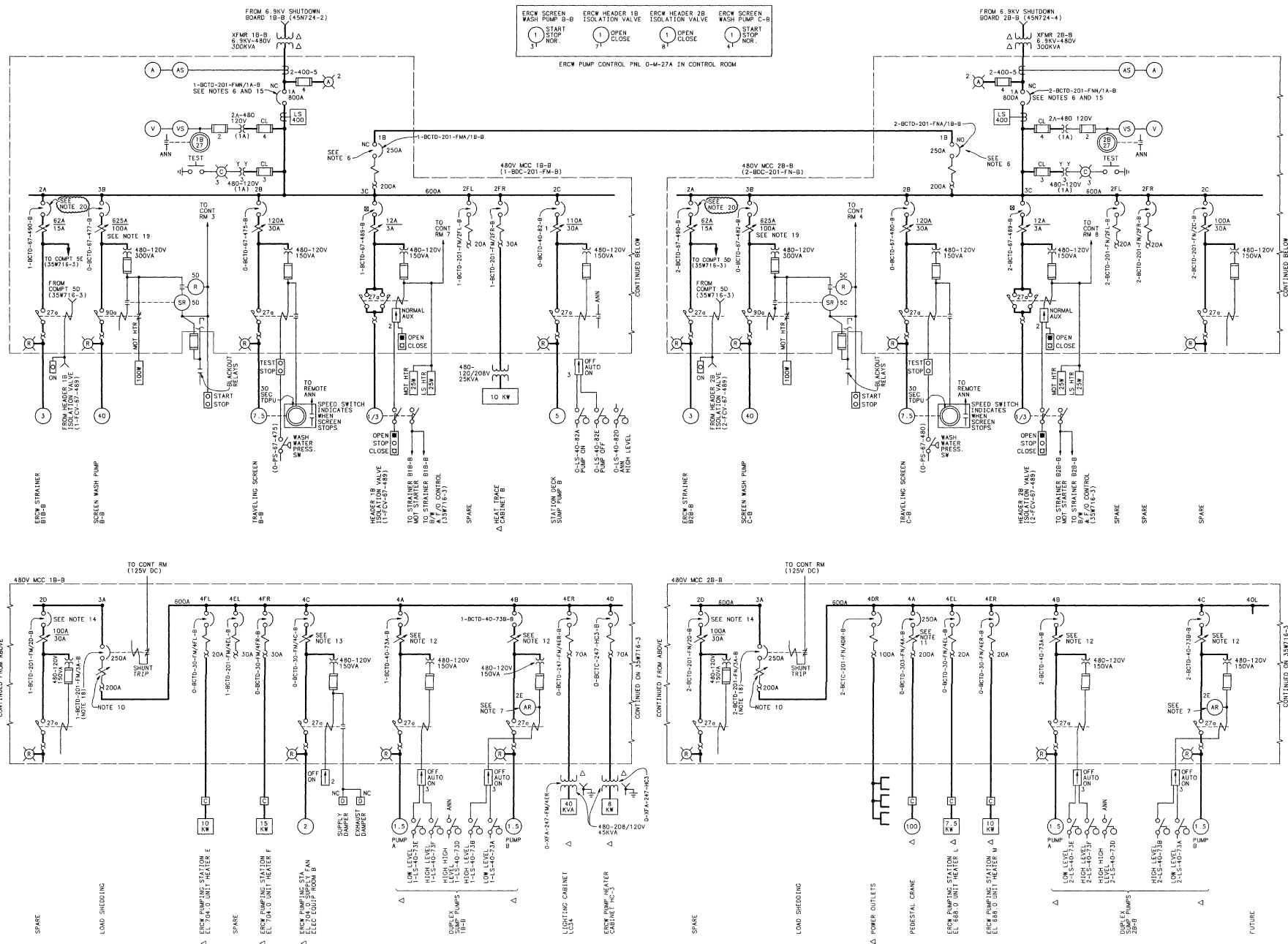
SQN-0-35W716-1 and 2, Single Line Diagrams for the 1A-A, 2A-A, 1B-B, and 2B-B ERCW MCCs

cc (Enclosure):

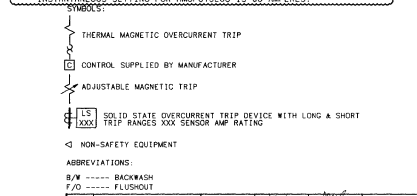
NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRC Project Manager – Sequoyah Nuclear Plant
Director, Division of Radiological Health - Tennessee State Department of
Environment and Conservation (w/o enclosure)

Enclosure

SQN-0-35W716-1 and 2
Single Line Diagrams for the 1A-A, 2A-A, 1B-B, and 2B-B ERCW MCCs



- NOTES:
- ALL MOLDED CASE CIRCUIT BREAKERS ARE 600V, 3 POLE, 100A FRAME WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 SYMMETRICAL RMS AMP AT 480V, EXCEPT AS NOTED. THE SYMBOLS DENOTES MCC COMPARTMENTS, FURNISHED BY FARWELL AND HENDRICKS OR CONTRACT PRESSURE (2837). THE FARWELL AND HENDRICKS COMPARTMENTS HAVE THE FOLLOWING CHARACTERISTICS:
 - HMCP BREAKERS ARE 150A FRAME WITH AN INTERRUPTING RATING OF NOT LESS THAN 65,000 RMS SYMMETRICAL AMPERES AT 480V.
 - IN REVERSING CONTACTORS RELAYS HAVE THREE CONVERTIBLE CONTACTS PER RELAY.
 - REVERSING STARTERS HAVE TWO CONVERTIBLE AUXILIARY CONTACTS PER CONTACTOR COIL.
 - THREE PHASES WILL HAVE THE OVERLOAD HEATER ELEMENTS INSTALLED, UNLESS ALL THREE PHASES HAVE JUMPERS INSTALLED.
 - BUS TIE, LOAD SHEDDING AND PEDESTAL CRANE CIRCUIT BREAKERS ARE 600V, 3 POLE, 250A FRAME WITH AN INTERRUPTING RATING OF NOT LESS THAN 22,000 SYMMETRICAL RMS AMPERES AT 480V.
 - MAIN CIRCUIT BREAKERS ARE 600V, 3 POLE, 800A FRAME WITH STATIC CURRENT SENSORS AND A MINIMUM INTERRUPTING RATING OF 30,000 RMS SYMMETRICAL AMPERES AT 480V.
 - ALL NON-REVERSING STARTERS TO BE PROVIDED WITH 2 NORMALLY OPEN AND 2 NORMALLY CLOSED ELECTRICAL SEPARATE AUXILIARY CONTACTS. ALL REVERSING STARTERS TO BE PROVIDED WITH NORMALLY OPEN AND 2 NORMALLY CLOSED ELECTRICAL SEPARATE AUXILIARY CONTACTS PER CONTACTOR WITH THE EXCEPTIONS AS NOTED IN NOTE 1.
 - STARTING THE SCREEN WASH PUMPS CAUSES A PRESSURE INCREASE IN THE WASH WATER LINE, WHICH STARTS THE TRAVELING SCREENS AUTOMATICALLY THROUGH THE NORMAL START IS PROVIDED BY EITHER THE DIFFERENTIAL PRESSURE DETECTOR OR LOCAL CONTROL STATION. THE PUMPS MAY BE STOPPED FROM THE UNIT CONTROL ROOM IN EMERGENCY, REGARDLESS OF THE MEANS OF STARTING. SCREENS CAN ONLY BE STOPPED LOCALLY.
 - THE MAIN FOR BKR ON MCC 1B-B, 2B-B AND THE TIE BKR ON 2B-B ARE KEY INTERLOCKED TO PREVENT THE TRANSFORMERS FROM BEING PARALLELED. THE MAIN FOR MCC 1B-B AND 2B-B AND THE MAIN FOR BKR CAN BE REMOVED ONLY WHEN THE BKR IS TRIPPED. THE BKR REMOVED FROM EITHER MAIN FOR BKR MUST BE USED TO CLOSE THE NORMALLY OPEN TIE BKR ON 2B-B, THE NORMALLY CLOSED BREAKER ON 1B-B MUST NOT BE USED TO OPEN THE TIE BKR ON 2B-B.
 - SUMP PUMPS ARE ELECTRICALLY ALTERNATED BY RELAY AR AT LOW LEVEL.
 - POWER HAS BEEN REMOVED FROM 1 & 2-FCV-67-489 BY OPENING THEIR RESPECTIVE ISOLATION VALVES.
 - NON-SAFETY EQUIPMENT HAS TRAINED CABLES AND TRAINED Nomenclature. REF EXCEPTION NUMBER EX-SON-DC-V-12.2-B (B418600-911).
 - LOAD SHEDDING SHUNT TRIP BREAKERS ARE TO HAVE THEIR ADJUSTABLE MAGNETIC TRIP SET ON "HIGH".
 - ADJUSTABLE MAGNETIC TRIP SET ON "HIGH".
 - BREAKER CAN BE EITHER WESTINGHOUSE/CUTLER-HAMMER MCP358RC/MCP358CR OR CUTLER-HAMMER HMCP1350C. THE CONTINUOUS SETTING FOR BOTH BREAKERS IS 15 AMPERES. THE INSTANTANEOUS SETTING FOR HMCP358RC/MCP358CR IS 43 AMPERES. THE INSTANTANEOUS SETTING FOR HMCP1350C IS 45 AMPERES (REFERENCE PEG PACKAGE 1183492H0).
 - BREAKER CAN BE EITHER WESTINGHOUSE/CUTLER-HAMMER MOTOR CIRCUIT BREAKER (MCP358RC/MCP358CR) OR CUTLER-HAMMER HMCP1350C. THIS APPLIES TO ERCW MCC 1B-B AND 2B-B, COMPARTMENT 20. REF PEG PACKAGE 1183492H0.
 - BREAKER CAN BE EITHER WESTINGHOUSE/CUTLER-HAMMER P/N MC3800 WITH LS400 TRIP UNIT OR CUTLER-HAMMER P/N MCL3800 CIRCUIT BREAKERS WITH M3800 TRIP UNIT. THIS APPLIES TO ERCW MCC 1B-B AND 2B-B, COMPARTMENT 1A. REF PEG PACKAGE 1071858AD.
 - SEE E150, TYPE TED/TED, 150A FRAME BREAKERS MAY BE SUBSTITUTED FOR SEE E100, TYPE TED/TED, 100A FRAME BREAKERS.
 - ALL OTHER ASPECTS SUCH AS RATING, NUMBER OF POLES, RATING AMPERE ETC. BEING EQUIVALENT CIRCUIT BREAKER MAY BE SUBSTITUTED FOR A TED CIRCUIT BREAKER.
 - BREAKER CAN EITHER BE CUTLER-HAMMER BREAKER J03200 WITH SHUNT TRIP OR WESTINGHOUSE BREAKER K53200 WITH SHUNT TRIP. REFERENCE PEG PACKAGE C0L602X-EQUIV.
 - BREAKER CAN BE EITHER WESTINGHOUSE/CUTLER-HAMMER MCP3100OR OR CUTLER-HAMMER HMCP1000C. BREAKER HMCP1000C SHOULD BE SET USING TRIP SETTING 0. REFERENCE PEG PACKAGE 7463020D.
 - BREAKER CAN BE EITHER WESTINGHOUSE/CUTLER-HAMMER MCP3100C OR CUTLER-HAMMER HMCP1000C. THE CONTINUOUS SETTING FOR BOTH BREAKERS IS 15 AMPERES. THE INSTANTANEOUS SETTING FOR HMCP1000C IS 43 AMPERES. THE INSTANTANEOUS SETTING FOR MCP3100C IS 45 AMPERES.



31	ADMIN CHANGE	BLR	WPK	3-2-16	
INC: ADMIN CHANGE PER RIMS 883 150316 THIS RESOLVES EWR-15-PEG-087-119, WO 116445478/116513511.					
REV	CHANGE REF	PREPARED	CHECKER	APPROVED	DATE
SCALE:	NONE			EXCEPT AS NOTED	
ERCW PUMPING STATION				CATEGORY 1	
WIRING DIAGRAMS 480V MCC 1B-B, 2B-B SINGLE LINES					
SEQUOYAH NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY					
DESIGN	INITIAL	ISSUE	ENGINEERING APPROVAL		
DRAFTER:	CHECKER:	RO ISSUE PER:	COD RECONCILIATION SHEET		
M. T. WALKER	OSW - BP	NO. COO-3095 TWO SHEETS A COO	1. A. CHAKRABARTI		
DESIGNER:	REVIEWER:	FROM AC-L & AD-R1D.	2. M. R. SEDLACK		
N/A	M. F. SCHAUSS JR.		3. N. GERRHOLTZER		
DATE	6-10-88	45	E	CCD NO: 1,2-35W716-2	R31

REFERENCE DRAWINGS:

- 15W500 KEY DIAGRAM
- 35W728-1, 2 SCHEMATIC DIAGRAMS
- 35W738-1 THRU 8 CONNECTION DIAGRAMS
- 35W748-1, 2, 3, 4 EXT CONNECTION DIAGRAMS

ISSUED BY: J. B. BOSMER

CAD MAINTAINED DRAWING

CONTROL ROOM DWG