

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 105B Lookout Place

November 15, 1985

Director of Nuclear Reactor Regulation  
Attention: Ms. E. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Ms. Adensam:

In the Matter of	)	Docket No. 50-327
Tennessee Valley Authority	)	50-328

As discussed with you and members of your staff in a telephone conversation on November 6, 1985, enclosed is a copy of the Sequoyah Nuclear Plant equipment qualification package status as of November 12, 1985. This information was telecopied to Carl Stahle of your staff on November 13, 1985.

By the September 27, 1985 letter from H. G. Parris to H. R. Denton, we submitted a request for an extension to the schedule for final environmental qualification of electrical cables for Sequoyah units 1 and 2. We hereby withdraw our request for an extension from NRC consideration.

By the March 26, 1985 letter to you from me, we transmitted a general status of the 10 CFR 50.49 qualification effort and an update to the summary status report of TVA's compliance with 10 CFR 50.49, "Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants." This information is being revised as part of our overall effort to establish qualification for the equipment at Sequoyah. This revised information will be provided to you during the week of December 16, 1985 and will replace the summary report provided to you on March 26. The updated report will contain our methodology for establishing the 10 CFR 50.49 equipment list, a brief description of our improved environmental qualification program (EQ) for identifying and maintaining EQ equipment, the resolution of Technical Evaluation Report (TER) findings, and the updated 10 CFR 50.49 equipment list.

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Director of Nuclear Reactor Regulation

November 15, 1985

If you have any questions, please get in touch with Jerry Wills at FTS 858-2683.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*R. H. Shell*

R. H. Shell  
Nuclear Engineer

Sworn to and subscribed before me  
this 15<sup>th</sup> day of Nov., 1985

*Bryant M. Lowery*  
Notary Public  
My Commission Expires 4/8/86

Enclosure

cc (Enclosure):

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Dr. J. Nelson Grace, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Mr. Carl Stahle  
Sequoyah Project Manager  
U.S. Nuclear Regulatory Commission  
7920 Norfolk Avenue  
Bethesda, Maryland 20814

12-Nov-85

DATE

PACKAGE NUMBER	DESCRIPTION/ MANUFACTURER/ MODEL NUMBER	CONTAINMENT	COMPLETE ACTION IDENTIFIED	NOT COMPLETE	REMARKS
(1) SOL-001	SOLENOID-VALCOR	1 : X	1 : X	1 : X	1 : AWAITING VENDOR INFO TO GIVE BASIS FOR : DETERMINATION OF POST ONE QUALIFIED LIFE.
(2) SOL-002	SOLENOID-TARGET ROCK	1 : X	1 : X	1 : X	1 : DETERMINE EFFECT OF PROCESS FLUID ON SOLENOID : COIL & SEAL LIFE. CONDUIT SEAL INSTALLATION.
(3) SOL-003	SOLENOID-TARGET ROCK	1 : X	1 : X	1 : X	
(4) SOL-004	SOLENOID-GOULD/VALLED (MSIV ACTUATOR MANIFOLD ASSEMBLY)	1 : X	1 : X	1 : X	
(5) SOL-005	SOLENOID-ASCO 206-380	1 : X	1 : X	1 : X	1 : NEED RAD SPECIFIC CALCULATIONS : CONDUIT SEAL INSTALLATION.
(6) SOL-006	SOLENOID-ASCO NF316	1 : X	1 : X	1 : X	1 : NEED RAD SPECIFIC CALCULATIONS.
(7) SOL-007	SOLENOID-ASCO 206-381	1 : X	1 : X	1 : X	1 : NEED RAD SPECIFIC CALCULATIONS.
(8) MOV-001	LIMITORQUE MOTOR OPERATED VALVES INSIDE CONTAINMENT	1 : X	1 : X	1 : X	1 : 2 MOTORS W/ UNQUAL INSUL REPLACED. 2 MO W/ BRAKES : NEED MOTOR CHANGED. WILL REPLACE ALL CONTROL WIRING.
(9) MOV-002	LIMITORQUE MOTOR OPERATED VALVES IN VALVE VAULT	1 : X	1 : X	1 : X	1 : CONTROL WIRING MUST BE REPLACED.
(10) MOV-003	LIMITORQUE MOTOR OPERATED VALVES OUTSIDE CONTAINMENT	1 : X	1 : X	1 : X	1 : RESOLVE MTR BRAKE ISS. STILL IN PROGRESS ON 11/18/ : BS FOR 174 VLVS. CONTROL WIRING MUST BE REPLACED.
(11) MOT-001	ELEC MOTORS-WESTINGHOUSE	1 : X	1 : X	1 : X	
(12) MOT-002	ELEC MOTORS-RELIANCE OUTSIDE CONT	1 : X	1 : X	1 : X	1 : MOTOR END BELLS ON 18 MOTORS ROTATED TO PROPERLY : LOCATE '1' DRAINS & DRILL WEEP HOLES IN JB.
(13) MOT-003	ELEC MOTORS-RELIANCE INSIDE CONT	1 : X	1 : X	1 : X	
(14) SOL-008	SOLENOID VALVES-TARGET ROCK	1 : X	1 : X	1 : X	
(15) CABL-001	CABLE-AIM (FJ31) (1) / LOW VOLTAGE POWER & CONTROL POLYETHYLENE INSULATED	1 : X	1 : X	1 : X	1 : FAILED 40YR TEST. WILL RETEST FOR 20YR : Q.L. EST TO BE COMP 11/28/85.

DATE 12-NOV-85

PACKAGE NUMBER	DESCRIPTION/ MANUFACTURER/ MODEL NUMBER	CONTAINMENT	COMPLETE ACTION IDENTIFIED	NOT COMPLETE	REMARKS
:(16)CABL-002	CABLE-A1W (P4J) / LOW VOLTAGE POWER & CONTROL	1: X	1: X	1: X	
:(17)CABL-003	CABLE-A1W (P4J, P4M) (T) / LOW VOLTAGE POWER & CONTROL	1: X	1: X	1: X	1: WYLE TEST DUE 12/7/85. CABLES ARE RATED 90 C; WERE : : DUAL FOR 60 C. CHANGING 2 W/ SERVICE TEMP OVER 60 :
:(18)CABL-004	CABLE-A1W (SROAJ) / LOW VOLTAGE POWER & CONTROL SILICONE RUBBER INSULATED	1: X	1: X	1: X	1: RELOCATE SOME CABLE ABOVE THE SUBMERGENCE LEVEL. :
:(19)CABL-006	CABLE-ANACONDA (MS, MSV) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	1: RELOCATE SOME CABLE ABOVE THE SUBMERGENCE LEVEL. :
:(20)CABL-008	CABLE-ANACONDA (P4N) / LOW VOLTAGE POWER & CONTROL	1: X	1: X	1: X	
:(21)CABL-009	CABLE-ANACONDA (SROAJ) (T) / LOW VOLTAGE POWER & CONTROL SILICONE RUBBER INSUL	1: X	1: X	1: X	1: RELOCATE SOME CABLE ABOVE THE SUBMERGENCE LEVEL. :
:(22)CABL-010	CABLE-BELDEN (MS) (T) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	
:(23)CABL-011	CABLE-B1W (MS) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	
:(24)CABL-012	CABLE-BRAND REX (MS, MSV) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	1: NEED VENDOR INFORMATION AND RELOCATE : : SOME CABLE ABOVE THE SUBMERGENCE LEVEL. :
:(25)CABL-014	CABLE-CYPRUS (CPSJ) (T) / MEDIUM VOLTAGE XLPE POWER	1: X	1: X	1: X	1: WYLE TEST EST COMP 11/12/85. :
:(26)CABL-015	CABLE-CYPRUS (P4J) (T) (MSV) / LOW VOLTAGE POWER & CONTROL POLYETHYLENE INSULATED	1: X	1: X	1: X	1: WYLE TEST DUE 12/7/85. CABLES RATED 75 C; WERE : : DUAL FOR 60 C. CHANGING 1 W/ SERVICE TEMP OVER 60 :
:(27)CABL-016	CABLE-CYPRUS (CPJ, CPJJ) (T) (MSV) / LOW VOLTAGE XLPE POWER & CONTROL	1: X	1: X	1: X	1: WYLE TEST REPORT DUE 12/7/85. :
:(28)CABL-017	CABLE-EATON (MS) (MSV) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	1: RELOCATE SOME CABLE ABOVE THE SUBMERGENCE LEVEL. :
:(29)CABL-019	CABLE-ESSEX (CPSJ, CPJ) (T) (MSV) / LOW VOLTAGE XLPE & MED VOLTAGE POWER & CONTROL	1: X	1: X	1: X	1: WYLE TEST DUE 12/7/85. CABLES ARE RATED 90 C; WERE : : DUAL FOR 60 C. CHANGING 6 W/ SERVICE TEMP OVER 60 :
:(30)CABL-020	CABLE-ESSEX (P4J) (T) (MSV) / LOW VOLTAGE POWER & CONTROL POLYETHYLENE INSULATED	1: X	1: X	1: X	1: WYLE TEST REPORT DUE 12/7/85. :

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PACKAGE NUMBER	DESCRIPTION/ MANUFACTURER/ MODEL NUMBER	CONTAINMENT	COMPLETE ACTION	COMPLETE IDENTIFIED	NOT COMPLETE	REMARKS
(131) CABL-021	CABLE-ESSEX (P2J, P1M) (MSV) / LOW VOLTAGE POWER & CONTROL	1: X	1: X	1: X	1: X	
(132) CABL-022	CABLE-GENERAL ELEC (P2J, P1M) (MSV) / LOW VOLTAGE POWER & CONTROL	1: X	1: X	1: X	1: X	
(133) CABL-023	CABLE-ITT (MS) (IT) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	1: X	
(134) CABL-028	CABLE-ORONITE (MS) (IT) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	1: X	WYLE TEST DUE 12/7/85.
(135) CABL-032	CABLE-PWC (P2J) (IT) (MSV) / LOW VOLTAGE POWER & CONTROL, ALPE	1: X	1: X	1: X	1: X	WYLE TEST DUE 12/7/85. CABLES ARE RATED 90 C; WERE DUAL FOR 60 C. CHANGING 1 W/ SERVICE TEMP OVER 60
(136) CABL-034	CABLE-PWC (P2J) (IT) (MSV) / LOW VOLTAGE POWER & CONTROL POLYETHYLENE INSULATED	1: X	1: X	1: X	1: X	WYLE TEST DUE 12/7/85.
(137) CABL-036	CABLE-ROCKBESTOS (S60A3) / LOW VOLTAGE POWER & CONTROL SILICONE RUBBER INSUL	1: X	1: X	1: X	1: X	RELOCATE SOME CABLE ABOVE THE SUBMERGENCE LEVEL.
(138) CABL-037	CABLE-ROCKBESTOS (MS) (MSV) / MULTICONDUCTOR SIGNAL	1: X	1: X	1: X	1: X	ADDRESS RADIATION SIMILARITY BETWEEN OLD AND NEW COMPOUNDS.
(139) CABL-042	CABLE-BRAND REX (CORX)	1: X	1: X	1: X	1: X	
(140) CABL-044	CABLE-ROCKBESTOS (P2J) / RALPE INSULATED SWITCHCARD	1: X	1: X	1: X	1: X	
(141) SPLT-001	SPLICE-RAYCHEM/ WISF-N	1: X	1: X	1: X	1: X	RELOCATE SOME SPLICES ABOVE THE SUBMERGENCE LEVEL.
(142) TB-001	TERM BLOCK-GENERAL ELECTRIC/ EB-5-25 CRISTIA & B	1: X	1: X	1: X	1: X	SOME TB'S REQUIRE WEEP HOLE TO BE DRILLED AND RELOCATE ABOVE SUBMERGENCE LEVEL.
(143) TB-002	TERM BLOCK-CUTLAR-HAMMER/ 10987H	1: X	1: X	1: X	1: X	SOME TB'S REQUIRE WEEP HOLE TO BE DRILLED AND RELOCATE ABOVE SUBMERGENCE LEVEL.
(144) TB-003	TERM BLOCK-WESTINGHOUSE/ 542240 SERIES	1: X	1: X	1: X	1: X	SOME TB'S REQUIRE WEEP HOLE TO BE DRILLED AND RELOCATE ABOVE SUBMERGENCE LEVEL.
(145) J801-001	JCT 801-J8-S	1: X	1: X	1: X	1: X	SOME TB'S REQUIRE WEEP HOLE TO BE DRILLED, RELOCATE: ABOVE FLOOD LEVEL & REPLACE SOME INTERNAL WIRING.

12-Nov-85

DATE

PACKAGE NUMBER	DESCRIPTION/ MANUFACTURER/ MODEL NUMBER	CONTAINMENT		COMPLETE ACTION		NOT COMPLETE	REMARKS
		INSIDE	OUTSIDE	FOR ISSUE	IDENTIFIED		
(146) CSC-001	CONDUIT SEALS-CONAX	1	X	X	1		
(147) PENE-001	PENETRATION (BLOCK)-CONAX/ MODULAR	1	X	X	1		
(148) PENE-002	PENETRATION (LP, C&I)-WESTINGHOUSE/ MODULAR	1	X	X	1		
(149) PENE-003	PENETRATION (NPP)-WESTINGHOUSE/ CANNISTER	1	X	X	1		
(150) PENE-004	PENETRATION (LP, C&I)-WESTINGHOUSE/ CANNISTER	1	X	X	1		
(151) PENE-005	PENETRATION (NIS)-CONAX/ MODULAR	1	X	X	1	X	1 : NEW PENETRATION BEING ADDED. : PACKAGE TO BE COMPLETED BY 12/2/85.
(152) HS-001	HANDSWITCH-CUTLAR-HAMMER	1	X	X	1		1 : 40 HANDSWITCHES TO BE REMOVED/ DISCONNECTED FROM : INSIDE CONTAINMENT.
(153) MCK-001	MOTOR CONNECTOR KIT-RAYCHEM MCK	1	X	X	1		
(154) MCK-002	CONNECTOR KIT-RAYCHEM MCKV	1	X	X	1	X	1 : PACKAGE TO BE COMPLETED BY 12/2/85.
(155) INTB-001	TRANSMITTER-BARTON LOT 7-764	1	X	X	1		1 : RELOCATE TRANSMITTERS, REMOVE TERMINAL : BLOCKS AND REPLACE WITH SPLICE.
(156) INTB-002	TRANSMITTER-F018080 E116M	1	X	X	1		
(157) INTB-003	TRANSMITTER-ROSEMOUNT/ 1153 083 PB, 1153 084 PB, 1153 085 PB	1	X	X	1		
(158) INTB-004	TRANSMITTER-BARTON LOT 7-763	1	X	X	1		1 : RELOCATE TRANSMITTERS, REMOVE TERMINAL : BLOCKS AND REPLACE WITH SPLICE.
(159) ITE-001	TEMP ELEMENT-MINCO/ 58809, 58810	1	X	X	1	X	1 : ADD MOISTURE SEALS.
(160) ITE-002	TEMP ELEMENT-ROSEMOUNT/ 1784F	1	X	X	1		

SEQUOIA EB PACKAGE STATUS AS OF NOV. 18, 1985

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PACKAGE NUMBER	DESCRIPTION/ MANUFACTURER/ MODEL NUMBER	CONTAINMENT	COMPLETE ACTION IDENTIFIED	NOT COMPLETE	REMARKS
161	ITE-003 TEMP ELEMENT-NEED/ N90015-24-240	1 : X	1 : X	1 : X	
162	TEMP SWITCH-FENVAL/ 17323-0, 18025-7, -0	1 : X	1 : X	1 : X	
163	ITS-002 TEMP SWITCH-SOR/ 2017A-8125-JJTT76	1 : X	1 : X	1 : X	
164	PRESSURE SWITCH-SOR/ 127A-884-NI-CIA- JJTT76	1 : X	1 : X	1 : X	
165	HTR-001 HEATER-VESTINGHOUSE/ MODEL A	1 : X	1 : X	1 : X	
166	ILP-001 LOCAL INSTR-CONSIP/DELPHI/ K-111M	1 : X	1 : X	1 : X	
167	ILT-001 LEVEL TRANSMITTER-F018080 E11DM	1 : X	1 : X	1 : X	
168	INT-001 SPECIAL MEASURE TRANSMITTER-TEC/ 1414	1 : X	1 : X	1 : X	
169	IFS-001 NONINDICATING FLOW SWITCH-FCI/ FR72, 1264	1 : X	1 : X	1 : X	
170	IRE-001 PRIMARY ELEMENT, RADIATION-GENERAL ATOMIC/ RD-23	1 : X	1 : X	1 : X	RELOCATE ABOVE FLOOD LEVEL.
171	ILM-001 LEVEL MODIFIER-MASONELIAN 8005A	1 : X	1 : X	1 : X	
172	ILCV-001 LEVEL CONTROL VALVE-MASONELIAN 8012	1 : X	1 : X	1 : X	
173	ITS-001 NONINDICATING ZONE SWITCH-NAMECO EA 180A	1 : X	1 : X	1 : X	NEED CONDUIT SEAL INSTALLED AND UPGRADE 3 SWITCHES.
174	ITS-002 NONINDICATING ZONE SWITCH-NAMECO EA 180B	1 : X	1 : X	1 : X	NEED CONDUIT SEAL INSTALLED.
175	ITS-003 NONINDICATING ZONE SWITCH-NAMECO EA 740A	1 : X	1 : X	1 : X	NEED CONDUIT SEALS AND SWITCH REPLACED.

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PACKAGE NUMBER	DESCRIPTION/ MANUFACTURER/ MODEL NUMBER	CONTAINMENT	COMPLETE FOR ISSUE	COMPLETE ACTION IDENTIFIED	NOT COMPLETE	REMARKS
(176) I2S-004	NONINDICATING ZONE SWITCH-NAMECO EA 740B	1	1	1	1	
(177) IMK-001	MOISTURE CONTROL STATION-NUTHERM	1	1	1	1	REDESIGN HUMIDITY HEATER CONTROLS.
(178) IPT-001	PRESSURE TRANSMITTER-WESTINGHOUSE/ 72PA1	1	1	1	1	
(179) IPT-002	PRESSURE TRANSMITTER-FOIBORD NE13	1	1	1	1	REPLACE TRANSMITTERS AND UPGRADE 2 TRANSMITTERS.
(180) IPT-001	FLOW TRANSMITTER-600LD/ FD-3200-400-19-22-36-2X	1	1	1	1	NEED CONDUIT SEALS INSTALLED.
(181) DMFQ-001	DAMPER OPERATOR-ITT GENERAL CONTROLS	1	1	1	1	BINDER BEING PREPARED.
TOTALS			36	27	18	
PERCENTAGES			44.44%	33.33%	22.22%	
TOTALS WITHOUT CABLES			27	19	8	
PERCENTAGES WITHOUT CABLES			50.00%	35.19%	14.81%	

# STATUS DEFINITIONS:

COMPLETE FOR ISSUE- NOTHING EFFECTING THE QUALIFICATION OF ANY DEVICE IN THE BINDER. ALL DEVICES QUALIFIED.

COMPLETE:CORRECTIVE ACTION IDENTIFIED- THE PACKAGE HAS DEFINED ALL DEVICES IN THE BINDER REQUIRING FULL COMPLIANCE AND A TRACKING VEHICLE ASSIGNED TO ASSURE THAT CORRECTIVE ACTION WILL BE COMPLETED AND VERIFIED.

NOT COMPLETE- SOME PROBLEM EXISTS WITH THE QUALIFICATION OF A DEVICE COVERED BY THE BINDER OR THE BINDER IS NOT COMPLETE.