ATTACHMENT A

A27 811110 017

400 Chestnut Street Tower II

November 10, 1981

NEB'81 11 17 627

JAR
JFC
JBL
JMA
MNB
NAL
NSA
SHR
GRJ

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

Dear Ms. Adensam:

In the Matter of) Docket Nos. 50-327
Tennessee Valley Authority) 50-328

During license review of Sequoyah unit 1, a commitment was made to provide a remote temperature monitoring system for those plant areas that contain safety-related equipment (NUREG-0011, Supplement 1, section 7.8.2). In the interim period, TVA committed to implement a daily surveillance program to perform this function. We have reevaluated the need for installation of the remote temperature monitoring system and determined that the existing surveillance program performs the same function as the remote temperature monitoring system. We propose that this surveillance program be utilized as the final resolution to this concern. Enclosure 1 provides the basis for our proposal.

Please provide a response to our request as soon as possible since installation of hardware or modifications is being suspended pending NRC approval of our request. If you have any questions regarding this subject, please call us at your earliest convenience.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Sworn to and subscribed before me
this 10th day of Nov, 1981
Bryant M. Lowery
Notary Public
My Commission Expires 4/4/82

NEB MASTER FILE

MEDS, 100 UB-K

RHS:JEW:ATK
Enclosure

8111170365

cc (Enclosure):
ARMS, 640 CST2-C
A. W. Crevasse, 401 UBB-C
H. N. Culver, 249A HBB-K
E. J. Ford, Sequoyah-NRC
H. J. Green, 1750 CST2-C
J. A. Raulston, W10C126 C-K
H. S. Sanger, Jr., E11B33 C-K
F. A. Szczepanski, 417 UBB-C

COORDINATED: NUC PR/Memo from HJG dated 9/30/81, another on the way

ENCLOSURE

REMOTE TEMPERATURE MONITORING SYSTEM - BASIS FOR REVISING COMMITMENT MADE IN NUREG-0011, SUPPLEMENT 1, SECTION 7.8.2
SEQUOYAH NUCLEAR PLANT

During the license review of Sequoyah unit 1, we made a commitment to provide a remote temperature monitoring system for the plant areas that contain safety-related equipment (reference NUREG-0011, Supplement 1, section 7.8.2). However, during the interim period, we agreed to implement a daily surveillance program to manually monitor these safety-related areas. For this purpose, SI-606, "Interim Balance of Plant Temperature Monitoring Program," was written and implemented (attached).

This surveillance instruction directs an assistant unit operator (AUO) to record temperatures in specific areas of the auxiliary building, the main control room, the diesel generator building, the ERCW pumping station, the additional equipment building, and four readings from the computer which monitors temperatures in the computer rooms. An AUO records these temperature readings once a shift (three times each day).

By taking these temperature readings once every shift, we believe these plant areas are being sufficiently monitored to ensure that temperature limits are maintained. Therefore, a remote temperature monitoring system would be of little improvement to the existing surveillance program. We propose to implement SI-606 as the permanent method of recording temperatures and not install the remote temperature monitoring system.

Sequoyah Nuclear Plant

SURVEILLANCE INSTRUCTION

SI-606

INTERIM BALANCE OF PLANT TEMPERATURE MONITORING PROGRAM

Units 1 and 2

Prepared By: Ben Lake

Revised By: F.E. Flynn

Submitted By: Daniel J. Record
Supervisor

PORC Review: 8/11/81
Date

Approved By: James W. Doty for
Pwr Plt Superintendent

Date Approved: 8/11/81

DISTRIBUTION

1C	Plant Master File
	Pwr Plant Superintendent
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	Assistant Pwr Plant Supt. (Maint.)
	Assistant Pwr Plant Supt. (H&S)
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	Maintenance Supervisor (M)
	Assistant Maintenance Supervisor (M)
	Maintenance Supervisor (E)
	Assistant Maintenance Supervisor (E)
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	Preop Test Program Coordinator
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	Radiochem Laboratory
	Instrument Shop
	Reactor Engineer (Results)
	Instrument Engineer (Maint. I)
1C	Mechanical Engineer (Results)
1U	Plant Services Supervisor
1C	Training Center Coordinator
	Public Safety Services - SNP
1C	Shift Engineer's Office
1C	Unit Control Room
	Health Physics Laboratory
1U	Nuclr Document Control Unit
1U	Pwr Plant Superintendent, WBNP
	Pwr Plant Superintendent, BFNP
	Pwr Plant Superintendent, BENP
1U	NEB-K
	Resident NRC Inspector - SNP
1C	NSRS-K
	Technical Support Center
1C	Unit Control Room #2
1U	Compliance Section Staff Supervisor

Rev. No.	Date	Revised Pages	Rev. No.	Date	Revised Pages
0	10/17/79	All	4	8/11/81	All
1	8/26/80	1,2,5,Add 2A			
2	10/29/80	3,4,5			
3	1/13/81	5			

The last page of this instruction is Number 6

INTERIM BALANCE OF PLANT TEMPERATURE MONITORING PROGRAM

1.0 SCOPE

1.1 This test consists of verifying the temperature of specific areas in auxiliary building, diesel generator building, ERCW pumping station, and main control room.

1.2 Requirements

1.2.1 Purpose - To verify the temperature at specific areas by visually reading and recording dry bulb air temperatures are below maximum limits. This is to collect data for history of area temperatures where ESF equipment is located.
1.2.2 Tech Specs - None
1.2.3 Mode operability requirement - N/A
1.2.4 Performance Mode(s) - All
1.2.5 Scheduling - No concurrent SI's
1.2.6 Frequency - Once per shift.
1.2.7 Additional Manpower Requirements - 1 AUO (1-1½ hrs per shift)

2.0 PRECAUTIONS

2.1 Notify SRO if any areas are above maximum limits, and begin recording temperatures of out of limit areas once per hour until temperatures are back within its limit.

3.0 REFERENCES

3.1 Memo from R. H. Dunham to H. S. Fox dated April 20, 1979.

3.2 Memo from M. N. Sprouse to J. R. Calhoun dated July 9, 1980.

3.3 Letter from M. Seano of Westinghouse to D. R. Patterson on UHI system dated June 20, 1978.

3.4 Westinghouse scoping document TVA/TEN SU-5.6.2 dated August 1978, Rev. 1.

4.0 INSTRUCTIONS

4.1 Record on data sheet 1 the temperature at the locations listed on location sheet-1. Use a calibrated digital temperature indicator to measure temperatures. (AUO should wait 1 minute at each location or when the temperature indication has stablized before recording the temperature)

4.2 If any local temperature exceeds its limit as listed on data sheet-1 record out of limit temperature every hour on data sheet-1 page 2 (at bottom) until temperatures are within limits. Record time and temperature reading each hour. Notify the Shift Engineer.

NOTE: Should any local temperature exceed its limit, attempt to restore temperature to normal, high temperature may be indication of failed ventilation and cooling systems.

LOCATION OF TEMPERATURE INDICATOR

Location Number	Location
TI-1	Auxiliary Building (AB), Elevation 653.0
TI-2	Auxiliary Building, Elevation 669.0, unit 1 side near Aux. Feedwater pump 1A-A door
TI-3	Auxiliary Building, Elevation 669.0, Unit 2 side near concentrate room
TI-4	Auxiliary Building, Elevation 690.0, Unit 1 side on 5-A4
TI-5	Auxiliary Building, Elevation 690.0, Unit 2 side on 5-A14
TI-6	Auxiliary Building, Elevation 714.0, Unit 1 side near T-A3 (fire hose)
TI-7	Auxiliary Building, Elevation 714.0, Unit 1 side near T-A13 (near ladder)
TI-8	Auxiliary Building, Elevation 734.0, Unit 2 side 5-A3 near fire exit
TI-9	Auxiliary Building, Elevation 734.0, Unit 2 side behind stairs A-13 S-13
TI-10	Auxiliary Building, Elevation 734.0, Unit 1 side beside tank
TI-11	Auxiliary Building, Elevation 749.0, Unit 1 side near A/C air return grille
TI-12	Auxiliary Building, Elevation 749.0, Unit 1 side phone 732 and fuse box.
TI-13	Auxiliary Building, Elevation 749.0, Unit 2 side near phone 357 and fuse box
TI-14	Auxiliary Building, Elevation 749.0, Unit 2 side near phone 356
TI-15	Auxiliary Building, Elevation 749.0, Unit 2 side near shutdown transformer 2B2-B
TI-16	Auxiliary Building, Elevation 763.0, Unit 1 side between fans on wall
TI-17	Auxiliary Building, Elevation 763.0, Unit 2 side between fans on wall
TI-18	Main Control Room
TI-19	D/G Building 722.0, Unit 2B-B

Location Number	Location
TI-20	D/G Building 740.0, 480V Board Room 2B
TI-21	ERCW Pumping Station (old, near pump H-A)
TI-22	Aux Bldg, Elevation 749.0 Unit 1 side near shutdown transformer 1A1
TI-23	Aux Bldg, Elevation 749.0 Unit 1 side near shutdown transformer 1B1
TI-24	Aux Bldg, Elevation 749.0 Unit 2 side near shutdown transformer 2A2
TI-25	U1 Additional equipment bldg Elevation 706 south side column between accumulators.

INTERIM BALANCE OF PLANT TEMPERATURE MONITORING PROGRAM

Unit 1 and 2

Unit _____

Date _____

List of data sheets attached.

Instruction No.	Data Sheet No.	Pages
3.1 and 3.2	1	1 and 2

Was data acceptance criteria satisfied? _____ Yes _____ No
If criteria were not satisfied, notify the shift engineer.

Reason for test:

_____ Required by schedule

_____ Other (explain) _____

Review of Test Results

SRO _____ Date _____

STA _____ Date _____

QA Staff _____ Date _____

Remarks _____

SHIFT LOG SHEET
(REACTOR OPERATING MODE _____) Date: ____/____/____

	REF.	INSTRU. NO.	NOTE	OPER.MODE	LIMITS	2300 0700	0700 1500	1500 2300	REMARKS
	3.1	TI-1	1	1,2,3,4	104°F				
		TI-2	1	1,2,3,4	104°F	___	___	___	_____
Interim Balance		TI-3	1	1,2,3,4	104°F	___	___	___	_____
of Plant Temp.		TI-4	1	1,2,3,4	104°F	___	___	___	_____
Monitoring		TI-5	1	1,2,3,4	104°F	___	___	___	_____
		TI-6	1	1,2,3,4	104°F	___	___	___	_____
		TI-7	1	1,2,3,4	104°F	___	___	___	_____
		TI-8	1	1,2,3,4	104°F	___	___	___	_____
		TI-9	1	1,2,3,4	104°F	___	___	___	_____
		TI-10	1	1,2,3,4	104°F	___	___	___	_____
		TI-11	1	1,2,3,4	104°F	___	___	___	_____
		TI-12	1	1,2,3,4	104°F	___	___	___	_____
		TI-13	1	1,2,3,4	104°F	___	___	___	_____
		TI-14	1	1,2,3,4	104°F	___	___	___	_____
		TI-15	1	All	104°F	___	___	___	_____
		TI-16	1	1,2,3,4	104°F	___	___	___	_____

OPERATOR INITIALS _____

(1) If readings exceed limit, notify the Shift Engineer and continue to take readings hourly until within limits.

Temperature Indicator No. _____ Calibration Date _____ Calibration Due _____
(If the temperature indicator is out of calibration notify the engineering test unit for a calibrated instrument.)

SHIFT LOG SHEET

(REACTOR OPERATING MODE _____) Date: ___/___/___

	REF.	INSTRU. NO.	NOTE	OPER.MODE	LIMITS	2300 0700	0700 1500	1500 2300	REMARKS
	3.1	TI-17	1	1,2,3,4	104°F	___	___	___	___
		TI-18	1	1,2,3,4	104°F	___	___	___	___
Interim Balance		TI-19	1	1,2,3,4	120°F	___	___	___	___
of Plant Temperature		TI-20	1	1,2,3,4	120°F	___	___	___	___
Monitoring		TI-21	1	1,2,3,4	120°F	___	___	___	___
		TI-22	1	All	104°F	___	___	___	___
		TI-23	1	All	104°F	___	___	___	___
		TI-24	1	All	104°F	___	___	___	___
		TI-25	2	All	>75°F <85°F	___	___	___	___
Computer Pts.		V8001A	3	1,2,3	>65°F<77°F	___	___	___	___
		V8002A	3	1,2,3	>65°F<77°F	___	___	___	___
		V8003A	3	1,2,3	>65°F<77°F	___	___	___	___
		V8004A	3	1,2,3	>65°F<77°F	___	___	___	___

OPERATOR'S INITIALS

		INSTRU. NO.	OUT OF LIMIT TEMP.	TIME	OPERATOR
Temperature out-of-limit hourly recording	3.2				

(1) If readings exceed limits, notify the shift engineer and continue to take readings hourly until within limi
(2) If readings exceed limits, adjust room air conditionm or heaters to stay within limits.

Computer Pts	V8001A	(3)	1,2,3	>65°F <77°F	___	___	___
	V8002A	(3)	1,2,3	>65°F <77°F	___	___	___
	V8003A	(3)	1,2,3	>65°F <77°F	___	___	___
	V8004A	(3)	1,2,3	>65°F <77°F	___	___	___

(3) If readings exceeds limits, initiate EMR to return air handling unit to service and repair/correct temperat immediately. These are junction box temperatures in the computer room and affect RCS ΔT/Tavg monitoring.

TVA 10753 (UNDES 10-80)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

NEB 820519 277

TO : H. J. Green, Director of Nuclear Power, 1750 CST2-C

FROM : M. N. Sprouse, Manager of Engineering Design, W11A9 C-K

DATE : MAY 19 1982

SUBJECT: SEQUOYAH AND WATTS BAR NUCLEAR PLANTS - BALANCE-OF-PLANT TEMPERATURE MONITORING SYSTEMS (BOPTMS)

References:
1. Memorandum from Roy H. Dunham to H. S. Fox dated April 20, 1979 (MEB 790423 383)
2. Memorandum from M. N. Sprouse to J. R. Calhoun dated July 9, 1980 (NEB 800709 264)
3. L. M. Mills' letter to the Nuclear Regulatory Commission dated November 10, 1981 (NEB 811117 627)
4. R. L. Tedesco's letter to H. G. Parris dated February 4, 1982 (NEB 820210 634)

Reference 1 requested that NUC PR install an interim BOPTMS at SQN to meet recent NRC requirements. This interim BOPTMS involved manually measuring the temperatures in various spaces until a permanent system could be installed. Reference 2 added three additional spaces to those being monitored on an interim basis.

On July 19, 1979, a detailed design criteria for the Sequoyah Nuclear Plant BOPTMS was issued (SQN-DC-V-17.0); and on February 12, 1981, a similar document was issued for Watts Bar Nuclear Plant (WB-DC-40-38). These were subsequently approved for installation on ECN L5023 for Sequoyah and ECN 2448 for Watts Bar.

Reference 3 requested that the NRC accept the interim BOPTMS as a permanent plant feature for SQN and the system proposed in SQN-DC-V-17.0 not be installed. In reference 4, the NRC granted approval to this request.

Following EN DES's receipt of reference 4, a series of telecons was held with NUC PR. During the course of these conversations, it became apparent that NUC PR plans to utilize the same type of surveillance at Watts Bar that the NRC approved for SQN. EN DES conducted an investigation into the acceptability of implementing the interim solution on a permanent basis. This investigation has resulted in the following recommendation:

Please add the following spaces to the areas now being monitored.

1. East and west main steam valve vaults - high temperature limit 120° F; low temperature limit 80°F (both temperatures in area of safety relief valves)

2. ERCW pump station electrical equipment rooms 1A and 2A - high temperature limit 120°F

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K. M. Black
W10D220 C-K

H. J. Green

MAY 19 1982

SEQUOYAH AND WATTS BAR NUCLEAR PLANTS - BALANCE-OF-PLANT TEMPERATURE MONITORING SYSTEMS (BOPTMS)

It is our feeling that if the areas above are added to those presently being monitored, the original interim solution will serve as an effective permanent BOPTMS for both SQN and WBN.

Original Signed by
R.W. Cantrell

M. N. Sprouse

JAR:KMB:CY
cc: J. P. Darling, 546 CST2-C
MEDS, 100 UB-K
H. H. Mull, E7B24 C-K
R. M. Pierce, 104 ESTA-K
John A. Raulston, W10C126 C-K
G. G. Stack, Sequoyah CONST (3)
J. C. Standifer, 204 GB-K
J. E. Wilkins, Watts Bar Nuclear CONST (3)

Principally prepared by: K. M. Black, extension 6388

E72120.02