TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

June 16, 1983

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 the Application of	)	Docket Nos. 50-390
Tennessee Valley Authority	)	50-391

In my letter to you dated November 9, 1982, TVA provided schedules for responding to open and confirmatory items in the Watts Bar Nuclear Plant Safety Evaluation Report. Enclosed is an updated listing showing the status of each of these items.

If you have any questions concerning this matter, please get in touch with D. P. Ormsby at FTS 858-2682.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Licensing

Sworn to and subscribed before me
this _____ day of _____ 1983

_____
Notary Public
My Commission Expires _____

Enclosure
cc: U.S. Nuclear Regulatory Commission (Enclosure)
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 1
(Sheet 1)

OUTSTANDING ISSUES

SER Item	Issue	Status	Schedule
1.	Potential for liquefaction beneath ERCW pipelines and Class 1E electrical conduit	An NRC-TVA meeting was held on 5/20/83. Based on this meeting and subsequent telephone calls, TVA is to provide field remedial action to be completed by fuel load of unit 1. TVA is evaluating the impact of 6-percent settlement. TVA-NRC to discuss this by 6/20/83. NRC to formally document their position that the top-of-ground motion should be .40g.	6/20/83
2.	Buckling loads on Class 2 and 3 supports	TVA submittal of 1/29/82. Telephone conference call of 4/1/82 requested clarification. This information provided on 11/10/82 and 11/18/82.	Not applicable
3.	Preservice and inservice pump and valve test program	The SER specifies that the NRC is reviewing TVA's submittal of 10/31/81. No TVA action is required.	Not applicable
4.	Seismic and environmental qualification of equipment	TVA responses to NRC SQRT audit items was submitted 9/23/83 and 12/1/82. During a 3/11/83 telephone conference call, the NRC requested additional clarification. This confirmation was submitted on 6/10/83.	Not applicable
		TVA is preparing a response for environmental qualification of equipment.	9/1/83
5.	Preservice and inservice inspection program	Responses to NRC questions Q121.20 and Q121.22 were provided by letter dated 7/30/82. Responses to NRC questions Q121.21 and Q121.23 were provided by letter dated 9/29/82. TVA commitment to provide a listing of welds included in the response to Q121.23. This information provided 4/18/83. TVA to provide a total list before commerical operation.	Commerical Operations
6.	Pressure-temperature limits for unit 2	The requested pressure-temperature limit curves for unit 2 are included in Amendment 48 of the Final Safety Analysis Report.	Not applicable
7.	Model D-3 steam generator preheater tube degradation	Information provided on 5/27/83. Completion of modifications is expected before fuel load.	Fuel load

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 1
(Sheet 2)

OUTSTANDING ISSUES

SER Item	Issue	Status	Schedule
8.	BTP-CSB 6-4 and containment isolation dependability	NRC letter of 5/14/82 requested additional information concerning compliance with items 1.b, 1.g, 5.a, and 5.c of BTP CSB 6-4. TVA response submitted 4/26/83. NRC letter of 10/5/82 requested information concerning containment purge and vent valve operability. TVA response in preparation.	

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 1
(Sheet 3)

OUTSTANDING ISSUES

SER Item	Issue	Status	Schedule
9.	Hydrogen Analysis Review	By letter dated 9/21/82, TVA specified that the revision to FSAR Section 15.4.1 did not effect the response to NRC question Q22.70. By telephone on 10/6/82, TVA was asked to rereview this position. TVA has reevaluated the impact on this question and confirmed that the response is not effected. NRC project manager informed 10/29/82.	Not applicable
10.	Safety valve sizing analysis	TVA response concerning applicability of WCAP-7769 submitted 4/18/83.	Not applicable
11.	Compliance of proposed design change to the offsite power system piping and components	The FSAR was revised by Amendment 48 to reflect the design changes for automatic fast transfer.	Not applicable
12.	Fire Protection Program	A review of SER Section 9.5.1 indicates that open items consist of emergency lighting, hydrogen line routing, and askarel insulated transformers. These items were addressed in letters dated 7/9/82, 8/28/81, and 6/3/82, respectively. NRC letter of 3/25/83 requested information demonstrating compliance with Appendix R. During a telephone conference call, the NRC requested additional information.	8/5/83
13.	Quality classification of diesel generator auxiliary system piping and components	TVA's response to the NRC position specified in the SER concerning qualification of diesel generator piping and components was submitted 11/30/82.	Not applicable
14.	Diesel generator auxiliary systems design deficiencies	TVA responses to NRC concerns about diesel generator cooling and lube oil systems submitted 6/9/83.	Not applicable
15.	Physical Security Plan	TVA submitted a revision to the Physical Security Plan to the NRC on 2/3/83 showing use of the power block concept. NRC comments were provided on 5/24/83. TVA responses in preparation.	8/5/83

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 1
(Sheet 4)

OUTSTANDING ISSUES

SER Item	Issue	Status	Schedule
16.	Boron Dilution Event	TVA's response to NRC concerns about single failure provided by letter dated 9/21/82.	Not applicable
17.	Q-List	The requested information was provided by letter dated 10/25/82. This is also included in FSAR Amendment 48.	Not applicable

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 2
(Sheet 1)

CONFIRMATORY ITEMS

SER Item	Issue	Status	Schedule
1.	Design basis groundwater level for the ERCW pipeline	The requested information concerning ground water level was provided to the NRC by letter dated 6/24/82.	Not applicable
2.	Material and geometric damping effect on SSE analysis	As a result of a TVA-NRC meeting 9/22-24/82 TVA provided the card deck used for computer runs to determine the 4 time histories for rock motion on 11/30/82.	Not applicable
3.	Analysis of sheet-pile walls	NRC letter of 6/1/83 requested additional information concerning sheetpile walls and soil properties for buried pipe. TVA responses in preparation.	8/5/83
4.	Design differential settlement of piping and electrical components between Class 1E structures	During a TVA-NRC meeting 9/22-24/82 the NRC stated this issue was satisfactorily resolved.	Not applicable
5.	Upgrading ERCW system to seismic Category I	TVA will complete necessary upgrading for ERCW systems which service air cooling units and chiller packages.	Date will be provided in final 50.55(e) report to NRC-OIE
6.	Seismic classification of structures, systems, and components important to safety	TVA is in the process of revising FSAR Table 3.2-2 to properly show seismic classification. This information will be included in FSAR Amendment 49.	9/15/83
7.	Tornado missile protection of diesel generator exhaust	In an 11/24/82 submittal, TVA agreed to modify the diesel generator exhaust stack to ensure continued d.g. operation following impact of a tornado missile.	Fuel load
8.	Steel containment building buckling research program	TVA to evaluate the WBN containment based on the results of the Los Alamos studies. Because Los Alamos has not released their final results, TVA cannot perform the evaluation. TVA does not expect to be able to complete this action until after fuel load.	3/1/84
9.	Pipe support base plate flexibility and its effects on anchor bolt loads	The SER specifies that the NRC is reviewing TVA's response to Bulletin 79-02. No TVA action is necessary.	Not applicable
10.	Thermal performance analysis	The thermal performance analysis has been	Not applicable

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 2
(Sheet 2)

CONFIRMATORY ITEMS

SER Item	Issue	Status	Schedule
		performed using PAD-3.3.	
11.	Cladding collapse	Westinghouse calculations for cladding collapse utilized a model consistent with WCAP-8377.	Not applicable
12.	Fuel rod bow evaluation	TVA's position on margins used to offset reduction in DNBR due to fuel rod bowing were provided to the NRC by letter dated 9/15/82.	Not applicable
13.	Loose parts monitoring system	TVA addressed specific NRC questions by letter to NRC on 11/10/82.	Not applicable
14.	Installation of residual heat removal system flow alarm	An RHR flow alarm will be installed to alert the operator to initiate alternate cooling modes in the event of loss of RHR.	Fuel load
15.	Natural circulation test	As specified in startup test SU-3.9 (Table 14.2-2A) a natural circulation test will be conducted for operator training as part of the startup test program.	After receipt of OL
		TVA will evaluate the Diablo Canyon tests and assess the applicability to Watts Bar.	After completion of Diablo Canyon
16.	Dump valve testing	The SER states that TVA is to confirm the feasibility of manual action to correct for single failure. TVA did not commit to verify manual actuation of atmospheric dump valves. TVA's position is included in part 1 of the response to NRC question 212.93 as provided by Amendment 44 of the FSAR.	Not applicable
17.	Protection against damage to containment from external pressure	TVA submitted information to the NRC on effects of inadvertent containment spray and air return fan actuation on containment pressure by letter dated 6/4/82.	Not applicable
18.	Designation of containment isolation valves for main and auxiliary feedwater bypass lines	TVA will install a safety grade isolation valve in the safety grade portion of each chemical feedline for each of four main feedwater, four feedwater bypass, and two auxiliary feedwater lines.	Fuel load

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 2
(Sheet 3)

CONFIRMATORY ITEMS

SER Item	Issue	Status	Schedule
19.	Compliance with GDC 51	TVA has been informally requested to revise its submittal of 12/17/82 concerning GDC-51.	8/5/83
20.	Insulation survey	The SER specifies TVA is to provide the results of an insulation survey in the vicinity of the sump before startup following the first refueling outage. This report submitted 11/23/82.	Not applicable
21.	Safety system setpoint methodology	TVA provided a list of safety related devices and a summary of the data used in the setpoint analysis to assist the NRC in a review of the Technical Specifications. on 3/18/83.	Not applicable
22.	Steam generator water level reference leg	As specified by TVA letter dated 6/21/82, it is TVA's intent to insulate the steam generator reference leg to minimize dependence problems.	Fuel load
23.	Containment sump level measurement	The FSAR will be revised in Amendment 49 to reflect design changes to protect sump level sensors from debris.	9/16/83
		TVA is in the process of implementing these design changes. Completion by fuel load.	Fuel load

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 2
(Sheet 4)

CONFIRMATORY ITEMS

SER Item	Issue	Status	Schedule
24.	IE Bulletin 80-06	Modifications are being made to ensure valves remain in the emergency mode after engineered safety features reset.	Fuel load
		The FSAR will be revised in Amendment 49 to show design changes to valves which ensure emergency mode after ESF reset.	9/15/83
25.	Overpressure protection during low temperature operation	Figure 7.6-5 of the FSAR was revised by Amendment 45 to show the switches for manual arming.	Not applicable
		TVA will install switches for manual arming on the main control panel.	Fuel load
		Manual arming will be included in the operating procedures.	Fuel load
26.	Availability of offsite circuits	The FSAR was revised in Amendment 48 to describe the Watts Bar Hydro Plant switchyard.	Not applicable
27.	Nonsafety loads powered from the Class 1E ac distribution system	The FSAR was revised in Amendment 48 to describe the design for each of the preferred offsite circuits.	Not applicable
28.	Low and/or degraded grid voltage condition	The analysis will be verified before full power operation.	Before full power
29.	Diesel generator reliability qualification testing	Copies of the Sequoyah diesel generator test results were provided to the NRC during a Watts Bar site visit on 7/26/82.	Not applicable
30.	Diesel generator battery system	The FSAR was revised in Amendment 48 to show compliance of the 125V battery system.	Not applicable
31.	Thermal overload protective bypass	NRC verification of the design of bypass of thermal-overload protection devices for motors and valves was conducted during the Watts Bar site visit on 7/26/82.	Not applicable

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 2
(Sheet 5)

CONFIRMATORY ITEMS

SER Item	Issue	Status	Schedule
32.	Sharing of dc and ac distribution systems and power supplied between units 1 and 2	The FSAR was revised in Amendment 48 to reflect requirements of the shared safety system.	Not applicable
33.	Sharing of raceways between units	Confirmation of shared raceway design conformance with GDC 5 was conducted during the Watts Bar site visit on 7/26/82.	Not applicable
34.	Testing Class 1E power systems	The FSAR was revised in Amendment 48 to describe testing of one of two class 1E power systems versus one of four systems.	Not applicable
35.	Evaluation of penetrations capability to withstand failure of overcurrent protection device	Information concerning the capability of penetrations to withstand the total range of of time current characteristics was submitted on 6/9/83 and 6/10/83.	Not applicable
36.	Missile protection for diesel generator vent line	TVA will provide missile protection for the diesel generator vents.	Fuel load
37.	Component booster pump relocation	TVA has completed relocating the component booster pumps above the maximum probable flood level.	Not applicable
38.	Electrical penetrations documentation	SER pages 9-34 specifies that the NRC is comparing the TVA test methods for electrical fire barrier penetrations against ASTM E-119. No TVA action is required.	Not applicable
39.	Compliance with NUREG-0660	TVA will install a heavy duty turbo charger gear assembly to ensure operability under no-load or light-load conditions and full rated speed.	Before second cycle
40.	No-load, low-load testing operations for diesel generators	The operating procedures provide for minimizing no-load and light-load operation.	Not applicable

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

TABLE 2
(Sheet 6)

CONFIRMATORY ITEMS

SER Item	Issue	Status	Schedule
41.	Initial test program	A revised FSAR Table 14.2-1 on preoperational testing was included in Amendment 48.	Not applicable