

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

May 8, 1984

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

By my letters to you dated January 12 and February 9, 1984, TVA provided information concerning various TVA commitments and Safety Evaluation Report (SER) items required before receipt of an operating license for Watts Bar Nuclear Plant. Enclosure 1 provides an updated status on certain items related to fire protection, and Enclosure 2 contains updated information on miscellaneous commitments.

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*

L. M. Mills, Manager  
Nuclear Licensing

Sworn to and subscribed before me  
this 8<sup>th</sup> day of May 1984

*Paulette H. White*

Notary Public

My Commission Expires 9-5-84

Enclosures (2)

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

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1983-TVA 50<sup>TH</sup> ANNIVERSARY

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## ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
FIRE PROTECTION

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
9.5.1.2	TVA commitment to relocate two (one primary and one secondary) fire pump relays.	Unit 1 - Complete Unit 2 - Open
9.5.1.2	By letter dated 8/28/81 from L. M. Mills to E. Adensam, TVA agreed that additional sprinkler heads would be provided or existing heads will be relocated in the Auxiliary Building to clear overhead obstructions and obtain minimum interference patterns where feasible so that floor areas are adequately covered.	Unit 1 - Complete Unit 2 - Complete
9.5.1.2	By letter dated 9/9/80 from L. M. Mills to A. Schwencer, TVA agreed to provide supervised alarm circuits for loss-of-line power and motor-running condition for each of the fire pumps and alarm and annunciation in the Main Control Room	Unit 1 - Complete Unit 2 - Complete
9.5.1.2	By letter dated 8/28/81, TVA agreed that additional fire water feed will be provided to the fire water suppression systems for the Diesel Generator Building.	Unit 1 - Complete Unit 2 - Complete
9.5.1.3	By letter from L. M. Mills to A. Schwencer dated September 9, 1980, TVA committed to provide fire dampers in the ventilation ducts when the ducts penetrate the fire barriers.	Unit 1 - Complete Unit 2 - Complete
9.5.1.3	By letter from L. M. Mills to E. Adensam dated August 28, 1981, TVA committed to ensure documentation of the approved rating for the fire door assemblies between the electrical board rooms in the Diesel Generator Building.	Unit 1 - Complete Unit 2 - Complete
9.5.1.4	As specified in a letter from L. M. Mills to A. Schwencer dated September 9, 1980 and clarified by letter from L. M. Mills to E. Adensam dated August 28, 1981 and by letter from D. S. Kammer to E. Adensam dated June 26, 1983, TVA committed to the following: fixed, self-contained lighting consisting of flourescent or sealed	Unit 1 - Complete Unit 2 - Complete

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
FIRE PROTECTION

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
	beam units with an individual eight-hour maximum battery power supply will be provided in areas that must be manned for safe shutdown and for access and egress routes to and from all fire areas containing equipment required for safe shutdown.	
9.5.1.5	By letter dated 9/9/80 from L. M. Mills to A. Schwencer, TVA agreed that exposed surfaces of cables at divisional interactions and in areas outside primary containment containing either or both redundant divisions of systems will be coated with a fire retardant material.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	As specified by this SER section, TVA was to install additional smoke detectors to actuate the automatic sprinkler system under the mezzanine for all five of the Component Cooling Water (CCW) pumps and to ensure early warning of a fire.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	By letter dated August 28, 1981 from L. M. Mills to E. Adensam, TVA committed to provide additional hose stations at the upper elevation of the intake pumping station.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	By letter dated August 28, 1981 from L. M. Mills to E. Adensam, TVA committed to install 4-inch high curbs at each entrance doorway to the Auxiliary Instrument Room.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	By letter dated July 9, 1982 from L. M. Mills to E. Adensam, TVA committed to modify the fire protection spray shields in the oil containment and collection system for the reactor coolant pumps in accordance with 10 CFR 50, Appendix R.	Unit 1 - Complete Unit 2 - Open
9.5.1.5	The SER specifies that TVA will provide automatic sprinkler coverage under the mezzanine for all five component cooling water pumps.	Unit 1 - Complete Unit 2 - Complete

## ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
FIRE PROTECTION

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
9.5.1.5	By letter dated 9/9/80 from L. M. Mills to A. Schwencer, TVA specified that all exposed cables within the Control Building cable spreading room will be coated with a fire retardant material.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	By letter dated 8/28/81 from L. M. Mills to E. Adensam, TVA agreed that all exposed cables within the Reactor Building annulus will be coated with a fire retardant mastic material.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	By letter dated 8/28/81 from L. M. Mills to E. Adensam, TVA agreed that all exposed cables in the Auxiliary Building at elevation 713.0 will be coated with a fire retardant mastic material.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	By letter dated 8/28/81 from L. M. Mills to E. Adensam, TVA agreed to install wire mesh screens on dampers in the auxiliary control instrument rooms.	Unit 1 - Complete Unit 2 - Complete
9.5.1.5	The SER states that TVA is required to provide a one hour fire-rated barrier to separate the train A CCW pumps, so that the barrier will extend approximately 3 feet above the highest point of each pump.	Unit 1 - Complete Unit 2 - Open
9.5.1.6	By letter dated 8/28/81 from L. M. Mills to E. Adensam, TVA agreed that the reciprocating charging pump control cables will be relocated as denoted in Table 1.3 of the 9/9/80 fire protection submittal.	Unit 1 - Complete Unit 2 - Complete
--	By letter dated 1/17/83 from L. M. Mills to E. Adensam, TVA committed to relocate portions of the wiring for components in the CVCS and CCS RCP seal cooling path that do not comply with fire separation criteria.	Unit 1 - Complete Unit 2 - Open
--	By letter dated 6/9/83 from L. M. Mills to E. Adensam, TVA committed to reroute Train B ERCW cables for units 1 and 2 to attain the 20-foot spatial separation from Train A ERCW cables.	Unit 1 - Complete Unit 2 - Complete

## ENCLOSURE 1

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
FIRE PROTECTION

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
--	By letter dated 8/28/81 from L. M. Mills to E. Adensam, TVA committed to install a flame arrestor for the vent on the oil collection system for the reactor coolant pump.	Unit 1 - Complete Unit 2 - Open
--	By letter dated 9/9/80 from L. M. Mills to A. Schwencer, TVA committed to flush the fire water system in accordance with TVA Construction Specification G-39 before preoperational testing.	Unit 1 - Complete Unit 2 - Complete
—	By letter dated 1/17/83 from L. M. Mills to E. Adensam, TVA committed to relocate portions of the wiring for valves in each relief path that do not comply with the fire separation criteria.	Unit 1 - Complete Unit 2 - Open

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
MISCELLANEOUS COMMITMENTS

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
3.9.3.3	By letter dated 7/22/83, TVA committed to change the internals of the Crosby HB-BP-86 6M6 safety valves from water to steam.	Unit 1 - Complete Unit 2 - Open
3.10	As a result of an NRC Seismic Qualification Review Team (SQRT) audit finding, TVA agreed by letter dated 12/1/82 from L. M. Mills to E. Adensam to adjust the mounting of the reactor protection system cabinet and engineering safeguards cabinet to ensure that a 0.5-inch minimum clearance is maintained.	Unit 1 - Complete Unit 2 - Open
3.10	As a result of an NRC SQRT audit finding, TVA agreed by letter dated 12/1/82 from L. M. Mills to E. Adensam that adequate clearance (1.0-inch minimum) will be provided for the relative motion due to seismic excitation between the reactor switchgear cabinet and the cable tray support.	Unit 1 - Complete Unit 2 - Open
4.48	By letter dated 3/11/82, TVA committed to install a reactor vessel level instrumentation system (RVLIS) before fuel load.	Unit 1 - Complete Unit 2 - Complete
5.4.3	By letter dated 9/25/81 from L. M. Mills to E. Adensam, TVA agreed that an RHR flow alarm will be installed to annunciate RHR low flow conditions. (This is noted as SER Confirmatory Item 16.)	Unit 1 - Complete Unit 2 - Open
5.4.5	By letter dated 10/29/81 from L. M. Mills to E. Adensam, TVA committed to install Reactor Coolant System vents. (This item is noted as SER License Condition 5.)	Unit 1 - Complete Unit 2 - Complete
6.2.4	By letter dated 1/25/83 from D. S. Kammer to E. Adensam, TVA agreed that the chemical feedlines will be detached from their existing injection points on the feed-water lines and the injection points capped and welded shut.	Unit 1 - Complete Unit 2 - Complete

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
MISCELLANEOUS COMMITMENTS

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
	Also, the number of chemical feedlines will be consolidated and relocated to injection points on the steam generator wet layup recirculation lines outboard of the primary containment outer isolation valve.	
7.3.2	By letter dated 10/27/81 from L. M. Mills to E. Adensam, TVA agreed that a screen will be installed around the sensing diaphragm of the containment sump level transmitter to prevent foreign material from blocking the diaphragm. (This is noted as SER Confirmatory Item 23.)	Unit 1 - Complete Unit 2 - Open
7.3.5	As stated in SER Confirmatory Item 24 and committed to by TVA's letter of 3/21/82, TVA has made modifications to ensure that the necessary valves remain in the emergency mode after ESF reset.	Unit 1 - Complete Unit 2 - Open
7.4.2	By letter dated 10/27/81 from L. M. Mills to E. Adensam, TVA agreed that steam generator level indicators will be installed on the auxiliary control panel.	Unit 1 - Complete Unit 2 - Open
7.6.2	By letter dated 12/15/81 from M. R. Wisenburg to E. Adensam, TVA agreed that Main Control Room indication of the RHR Letdown Bypass valve status will be indicated on the plant computer. The status will be displayed on demand and an alarm will be initiated anytime the valve is not in the fully closed position.	Unit 1 - Complete Unit 2 - Open
7.6.3	By letter dated 12/15/81, TVA committed to install a switch on the UHI panel in the Main Control Room to enable the operator to close the UHI isolation valve through a safety-related circuit.	Unit 1 - Complete Unit 2 - Open
8.3.3.3	By letter dated 6/9/83, TVA agreed that to negate the requirement for testing of the thermal overload protective devices on the motor-operated valves, fuses or circuit breakers would be installed.	Unit 1 - Complete Unit 2 - Open

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
MISCELLANEOUS COMMITMENTS

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
8.3.3.6	By letter dated 6/9/83 from D. S. Kammer to E. Adensam, TVA agreed that protective devices will be provided for the two circuits pro- tected by a single circuit breaker.	Unit 1 - Complete Unit 2 - Complete
8.3.3.6	The SER restates an FSAR commitment that a redundant reactor coolant pump circuit breaker will be installed in series with the existing circuit breaker.	Unit 1 - Complete Unit 2 - Open
9.2.2	By letter dated 10/28/81 from L. M. Mills to E. Adensam, TVA committed to relocate the thermal barrier booster pumps, in the Component Coolant System, above the probable maximum flood level (el. 738.1). This is specified in the SER as confirmatory item 37.	Unit 1 - Complete Unit 2 - Complete
9.5.4.2	By letter dated 3/17/82 from L. M. Mills to E. Adensam, TVA agreed that appropriate missile protection from tornado-generated missiles will be provided for the seven-day tank vents.	Unit 1 - Complete Unit 2 - Complete
9.5.6	TVA committed in response to NRC question 040.100 to install a regenerative (dual-power) desiccant- type air dryer with a coalescing pre- filter and particulate after-filter in the diesel generator starting air system.	Unit 1 - Complete Unit 2 - Open
9.5.7	In response to NRC questions 40.106, TVA specified that the diesel generator lube oil system will be modified to alleviate the NRC's concern and two motor-driven pumps would be added and modifications to the piping performed.	Unit 1 - Complete Unit 2 - Complete
11.3	In response to NRC question 321.14, TVA committed to install an oxygen analyzer in the waste gas treatment system to sample waste gases at the discharge of the compressor between the compressor and its discharge valve.	Unit 1 - Complete Unit 2 - Complete

## ENCLOSURE 2

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
MISCELLANEOUS COMMITMENTS

<u>SER Section</u>	<u>Item</u>	<u>Status</u>
11.7.1	By letter dated 6/7/83, TVA agreed that permanent high-range noble gas effluent monitors will be installed before fuel load.	Unit 1 - Complete Unit 2 - Open
11.7.2	By letter dated 9/14/81 from L. M. Mills to E. Adensam, TVA committed to incorporate a second pressure boundary on approximately 20 vents and drains found on pump suction lines and pump casings of systems carrying radioactive fluid.	Unit 1 - Complete Unit 2 - Open
12.7.2	By letter dated 8/12/82 from L. M. Mills to E. Adensam, TVA agreed that redundant high-range containment monitors would be installed. (This item is noted as SER License Condition 6.)	Unit 1 - Complete Unit 2 - Open
Chapter 14	By letter dated 11/16/81 from L. M. Mills to E. Adensam, TVA committed to revise FSAR table 14.2-1 to reflect changes in preoperational tests TVA-27B, TVA-43A, and TVA-43B.	Unit 1 - Complete Unit 2 - Complete
Appendix C	By letter dated 1/27/82 from L. M. Mills to E. Adensam, TVA committed to install a permanent hydrogen mitigation system.	Unit 1 - Complete Unit 2 - Open
NUREG-0737 Item II.D.1	By letter dated 7/22/83, TVA committed to modify supports due to the increase in support loads for the safety valve and PORV piping.	Unit 1 - Complete Unit 2 - Open
NRC Question Q31.128	In response to this question, TVA agreed to provide additional heat tracing and insulation on the refueling water storage tank, feedwater flow, and mainsteam pressure instrumentation.	Unit 1 - Complete Unit 2 - Complete
--	By letter dated 1/19/82 from L. M. Mills to E. Adensam, TVA agreed that floor gratings will be provided on the underside of the opening for the 480-V shutdown	Unit 1 - Complete Unit 2 - Complete

ENCLOSURE 2

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
MISCELLANEOUS COMMITMENTS

SER Section

Item

Status

transformers, the 125-V vital batteries, and the diesel generator auxiliary control board to prevent tornado-generated missiles from entering the intake and/or exhaust vents.

By letter dated 9/14/81, TVA agreed that the Technical Support Center (TSC) would be in operation by fuel load with the exception of the computer-based data system.

Unit 1 - Complete  
Unit 2 - Complete