

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

January 16, 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 the Application of) Docket Nos. 50-390
Tennessee Valley Authority) 50-391

During a telephone conference call on November 27, 1984, TVA was requested to provide additional information concerning power systems at Watts Bar Nuclear Plant. Enclosed is information related to these concerns.

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

J. A. Domer

J. A. Domer
Nuclear Engineer

Sworn to and subscribed before
me this 16th day of Jan 1985.

Paulette N. White

Notary Public

My Commission Expires 8-24-88

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 30323

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
NRC POWER SYSTEMS BRANCH OPEN ITEMS

NRC Request

1. The NRC requested clarification of FSAR page 8.1-2 (4th paragraph) which appears to contradict requirements of GDC 5 for capacity of diesel generators at standby. TVA agreed to revise the FSAR to state that sufficient capacity exists to safely shutdown one unit in the event of a LOCA in the other unit.

Response

See FSAR page 8.1-2 as revised by Amendment No. 54.

NRC Request

2. The NRC requested that TVA justify the revision submitted in Amendment 52 to FSAR page 8.1-13 concerning WBN compliance with position C.14 of Regulatory Guide 1.9. TVA stated that the revision was made by mistake and the FSAR would be revised to restate the information previously provided in Amendment 48.

Response

See FSAR pages 8.1-13 and 8.1-14 as revised by Amendment No. 54.

NRC Request

3. TVA was requested to clarify the capacity of the D.G. batteries as stated on FSAR page 8.3-16. TVA stated that the capacities of 48 amps for one minute and 4 amps for 30 minutes were typographical errors. The FSAR would be revised to reflect the correct values of 65 amps (one minute) and 41 amps (30 minutes).

Response

See FSAR page 8.3-16 as revised by Amendment No. 54.

NRC Request

4. Draft supplement 3 to the Safety Evaluation Report (SSER 3) (see attached) section 8.3.2.2 requested that TVA provide justification for not including (1) battery circuit input current monitor and (2) DC bus undervoltage main control room alarm.

Response

The requested information, as previously discussed with the NRC staff on March 16, 1984, was provided by TVA letter dated April 24, 1984 from L. M. Mills to E. Adensam.

NRC Request

5. As specified in draft SSER3 section 8.3.3.1.1, TVA was requested to provide copies to drawings verifying design for automatic deenergization of circuit loads as a result of a LOCA.

Response

The following is a listing of devices identified in the control power and ac auxiliary power system submergence studies that are automatically deenergized by a safety injection or isolation signal.

1-MTR-77-4	Reactor coolant drain tank pump 1A
2-MTR-77-4	Reactor coolant drain tank pump 2A
1-MTR-77-6	Reactor coolant drain tank pump 1B
2-MTR-77-6	Reactor coolant drain tank pump 2B
1-MTR-77-125	Containment floor and equipment drain sump pump 1A
1-MTR-77-126	Containment floor and equipment drain sump pump 1B
2-MTR-77-125	Containment floor and equipment drain sump pump 2A
2-MTR-77-126	Containment floor and equipment drain sump pump 2B
1-MTR-30-83/1-A	Control rod drive mechanism cooler fan 1A-A MTR 1
1-MTR-30-88/1-A	Control rod drive mechanism cooler fan 1C-A MTR 1
2-MTR-30-83/1-A	Control rod drive mechanism cooler fan 2A-A MTR 1
2-MTR-30-88/1-A	Control rod drive mechanism cooler fan 2C-A MTR 1
1-MTR-30-92/1-B	Control rod drive mechanism cooler fan 1B-B MTR 1
1-MTR-30-80/1-B	Control rod drive mechanism cooler fan 1D-B MTR 1
2-MTR-30-92/1-B	Control rod drive mechanism cooler fan 2B-B MTR 1
2-MTR-30-80/1-B	Control rod drive mechanism cooler fan 2D-B MTR 1
1-MTR-30-83/2-A	Control rod drive mechanism cooler fan 1A-A MTR 2
1-MTR-30-88/2-A	Control rod drive mechanism cooler fan 1C-A MTR 2
2-MTR-30-83/2-A	Control rod drive mechanism cooler fan 2A-A MTR 2
2-MTR-30-88/2-A	Control rod drive mechanism cooler fan 2C-A MTR 2
1-MTR-30-92/2-B	Control rod drive mechanism cooler fan 1B-B MTR 2
1-MTR-30-80/2-B	Control rod drive mechanism cooler fan 1D-B MTR 2
2-MTR-30-92/2-B	Control rod drive mechanism cooler fan 2B-B MTR 2
2-MTR-30-80/2-B	Control rod drive mechanism cooler fan 2D-B MTR 2

The TVA drawings depicting these components are as follows (copies of these drawings were sent directly to T. Kenyon, NRC Project Manager):

47W760-30-8 R10
47W760-30-26 R4
47W760-77-3 R5
47W760-77-4 R4
47W600-57-16 R1
47W600-62-2 R6
47W600-77-1 R7
47W600-77-2 R4
47W600-87-2 R4

The following valves have been identified in the control power system submergence analysis to be automatically denergized by a LOCA:

1(2)-FSV-62-72
1(2)-FSV-62-73
1(2)-FSV-62-74
1(2)-FSV-62-76
1(2)-FSV-87-7
1(2)-FSV-87-8

NRC Request

6. The NRC requested justification for statements on FSAR page 8.3-39 (second paragraph) concerning separation of 6900 cables greater than 2/0. TVA stated that the FSAR would be revised to specify that TVA takes no credit for spacing of medium voltage cables for ampacity purposes.

Response

See FSAR page 8.3-39 as revised by Amendment No. 54.

NRC Request

7. TVA was requested to justify routing of more than one cable with suffix S in the same conduit as specified on FSAR page 8.3-47b.

Response

As stated in the FSAR, two conditions must be satisfied before suffix S cables can be routed together: (1) voltage levels are compatible, and (2) circuits are designed such that under any design basis event all cables in the raceway will always be the same divisions (channel or train) when energized. These requirements are contained in design criteria WB-DC-30-4 which established them as part of the design basis of the plant. The design has been checked against these requirements and TVA is, therefore, confident that they have been met in the plant design.

NRC Request

8. SSER 3 section 8.2(1) stated that FSAR figure 8.3-5a is not consistent with the TVA's verbal description of the design for automatic transfer to preferred offsite circuits on degraded grid voltage as provided to the NRC in conference calls of October 27 and November 1, 1983. During the conference calls the NRC indicated that this issue was resolved.