

400 Chestnut Street Tower II

July 11, 1980

Director of Nuclear Reactor Regulation  
Attention: Mr. A Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Schwencer:

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

In response to informal questions asked by J. Spraul on the Sequoyah Nuclear Plant Final Safety Analysis Report (FSAR) Table 17.2-1, we are enclosing the following information.

Enclosure 1 - Responses to J. Spraul's Questions on FSAR Table 17.2-1

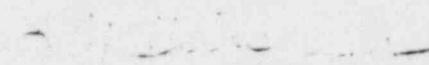
Enclosure 2 - Appendix A to the Operational Quality Assurance Manual (OQAM) for Sequoyah Nuclear Plant, "The Critical Structures, Systems, and Components List"

Enclosure 3 - Part III, Section 2 of the OQAM for Sequoyah Nuclear Plant, "Materials and Spare Parts"

If you have any questions please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosures

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ENCLOSURE 1

Responses to Questions on FSAR Table 17.2-1

1. Question:

The following items from the Q-list (FSAR Table 17.2-1) need expansion and/or clarification as noted. Revise the list as indicated or justify not doing so.

- |       |                                |                                                                                                                                        |
|-------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 1.0   | Primary Containment            | Include missile barriers and containment sump system.                                                                                  |
| 2.2   | Electrical                     | Identify the specific electrical systems included.                                                                                     |
| 3.1   | Emergency Gas Treatment System | Include H <sub>2</sub> -O <sub>2</sub> monitors, H <sub>2</sub> recombiner, and control panel.                                         |
| 4.0   | Reactor Building               | Include missile barriers.                                                                                                              |
| 4.2   | Containment Purge System       | Include radiation monitors.                                                                                                            |
| 5.0   | Auxiliary Building             | Include filters for the ventilation system and include individual room vent systems for SI, RHR, and JS pump rooms.                    |
| 5.9   | Fuel Handling Area Ventilation | Include fuel handling system radiation monitor.                                                                                        |
| 6.0   | Control Building               | Include filters for the ventilation system.                                                                                            |
| 6.3   | Main Control Room A/C System   | Identify the systems included such as the radiation monitoring system, the chlorine monitoring system, etc.                            |
| 10.0  | Refueling Water Storage Tank   | Identify the systems included.                                                                                                         |
| 11.0  | Reactor Coolant System         | Identify leak detection system, PORV's pressurizer safety valves, PORV block valves, and RCP cooling water and RCP seal water systems. |
| 11.11 | Electrical                     | Identify the electrical systems included.                                                                                              |

12.1	Main Steam	Indicate that the system extends to and includes the outermost containment isolation valves and includes the steamline power operated atmospheric dump valves.
13.1	Main Feedwater System	Indicate that the system extends to and includes the outermost containment isolation valves.
14.0	Safety Injection System	Include sump instruments and RWST level instruments needed for switchover to recirc phase.
16.0	Containment Spray System	Include cold leg accumulators.
18.0	Chemical and Volume Control System	Include boron recovery system.
22.0	Instruments and Controls	Include reactor trip system and ESF actuation system.
22.1	Cabinets, Panels, Racks	Include sensors, indication systems, and annunciation systems.
23.0	Emergency Power System	Include the emergency diesel fuel oil system including the storage tanks.
23.1	Diesel Generator System	Include auxiliary systems such as the lube oil system, the air starting system, and the jacket cooling system.
24.	Upper Head Injection System	Include isolation valves and the system.
30.	Safety Related Display Indication	Identify the systems included and include meteorological data collection system.

Response:

A complete explanation of these items, with two exceptions, is found in the detailed listing of critical structures, systems, and components (CSSC) which is contained in the Sequoyah Operational Quality Assurance Manual. As explained in the preface to Table 17.2-1, the detailed CSSC list is maintained at the plant but a copy of the current list is attached for NRC review. One exception is the NRC comment on section 16.0. There are no cold leg accumulators in the containment spray system. The other exception is the meteorological data collection system. TVA's meteorological data collection system is maintained by a different division within TVA and the required quality assurance program is conducted by that division and is not contained in the Division of Nuclear Power's CSSC list.

2. Question:

The following items do not appear on the Q-list (FSAR Table 17.2-1). Add these items to the list or justify no doing so:

- a. Cooling Towers.
- b. Environmental Monitoring System for areas that contain safety-related equipment.
- c. Electro-Hydraulic Control System - Portions that control the closing of turbine stop valves, intercept valves, turbine bypass valves, and other main steam system downstream valves that are needed to close in the event of a MSLB with failure of MSIV to close.
- d. Emergency AC Auxiliary Power Systems (Class IE)
  1. Fire Stops and Seals
  2. AC Power Inverters
  3. Auxiliaries associated with the diesel generator system
  4. Switchgear, Load Centers, and Motor Control Centers
- e. 125 Volt Class IE DC Vital Power Distribution System
  1. Battery Racks
  2. Cable Trays and Supports (Raceway installation containing Class IE cables and other raceway installations required to meet seismic Category I requirements)
- f. Expendable and Consumable Items necessary for the functional performance of CSSC (i.e., weld rod, fuel oil, boric acid, snubber oil, etc.)
- g. Measuring and Test Equipment
- h. Spent Fuel Pool Gates

Response:

- a. The cooling towers are not included in the CSSC list since they are not part of the Ultimate Heat Sink and thus have no safety function.
- b. A detailed listing of safety-related environmental monitoring instruments is contained in the attached CSSC list.

- c. The turbine stop valves, intercept valves, turbine bypass valves, and other main steam system downstream valves provide no safety or isolation function in the event of a main steamline break. Thus, that accident sequence is not a justification for including the operators and control systems for these valves on the CSSC list.
- d. All of these items are included in the attached CSSC list.
- e. All of these items are included in the attached CSSC list.
- f. The CSSC list contains only permanently installed structures, systems, and components. Expendable and consumable items necessary for the functional performance of CSSC and measuring and test equipment used on CSSC are controlled by separate procedures as explained in the TVA Topical Report, TVA-TR-75-1A, "Quality Assurance Program Description for Design, Construction, and Operation of TVA Nuclear Power Plants."
- g. See response to item f. above.
- h. The spent fuel pool gates are not on the CSSC list because failure of the gates would not lead to unacceptable water levels in the spent fuel pool.