

REGULATORY DOCUMENTS  
JULY 08 1980

Docket Nos. 50-259  
50-260  
and 50-296

Distribution:

✓ Docket Tippolito  
NRC PDR RJClark  
Local PDR SNorris  
ORB Reading NSIC  
NRR Reading TERA  
DEisenhut ACRS (16)  
RPurple JHeltemes, AEOD  
TNovak  
RTedesco  
GLainas  
JOlshinski  
OELD  
OI&E (3)

Mr. Hugh G. Parris  
Manager of Power  
Tennessee Valley Authority  
500A Chestnut Street Tower II  
Chattanooga, Tennessee 37401

Dear Mr. Parris:

Reference is made to our letter of February 26, 1980 and your response of April 7, 1980 regarding containment purging and venting at Browns Ferry Unit Nos. 1, 2 and 3. Our continuing review has identified the need for the additional information described in the enclosure to this letter. A response to the enclosed request for additional information within 60 days is requested.

Sincerely,

ORIGINAL SIGNED BY

Thomas M. Novak, Assistant Director  
for Operating Reactors  
Division of Licensing

Enclosure:  
Request for Additional Information

cc w/enclosure:  
See next page

T

8007210026

\*\*\*SEE PREVIOUS YELLOW FOR CONCURRENCE

OFFICE	ORB #2	ORB #2	AD:DJ		
SURNAME	*RJClark:kk	*TAippolito	TNovak		
DATE	7/7/80	7/8/80	1/9 / 80		

JULY 08 1980

Docket Nos. 50-259  
50-260  
and 50-296

Mr. Hugh G. Parris  
Manager of Power  
Tennessee Valley Authority  
500A Chestnut Street Tower II  
Chattanooga, Tennessee 37401

Distribution:

Docket	Tippolito
NRC PDR	RJClark
Local PDR	SNorris
ORB Reading	NSIC
NRR Reading	TERA
DEisenhut	ACRS (16)
RPurple	JHeltemes, AEOD
TNovak	
RTedesco	
GLainas	
JOIshinski	
OELD	
OI&E (3)	

Dear Mr. Parris:

Reference is made to our letter of February 26, 1980 and your response of April 7, 1980 regarding containment purging and venting at Browns Ferry Unit Nos. 1, 2 and 3. Our continuing review has identified the need for the additional information described in the enclosure to this letter. A response to the enclosed request for additional information within 60 days would be appreciated.

Sincerely,

ORIGINAL SIGNED BY

Thomas M. Novak, Assistant Director  
for Operating Reactors  
Division of Licensing

Enclosure:  
Request for Additional Information

cc w/enclosure:  
See next page

OFFICE	ORB #2	ORB #2	AD:DL			
SURNAME	RJClark/kk	TAIppolito	TMNovak			
DATE	7/7/80	7/8/80	1/1			

Mr. Hugh G. Parris

- 2 -

July 8, 1980

cc:

H. S. Sanger, Jr., Esquire  
General Counsel  
Tennessee Valley Authority  
400 Commerce Avenue  
E 11B 33 C  
Knoxville, Tennessee 37902

Mr. Ron Rogers  
Tennessee Valley Authority  
400 Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Mr. H. N. Culver  
249A HBD  
400 Commerce Avenue  
Tennessee Valley Authority  
Knoxville, Tennessee 37902

Robert F. Sullivan  
U. S. Nuclear Regulatory Commission  
P. O. Box 1863  
Decatur, Alabama 35602

Athens Public Library  
South and Forrest  
Athens, Alabama 35611

REQUEST FOR ADDITIONAL INFORMATION  
BROWNS FERRY UNITS 1, 2 AND 3

1. Describe the size and purpose and provide the valve identification numbers of the valves in the Containment Atmospheric Dilution (CAD) System and (if provided in your design) the Containment Atmospheric Control (CAC) System. Also specify the current status (e.g., tagged shut, mechanical stops, etc.) for each of these valves.
2. With regard to the "torus/drywell bypass" switch and the individual Primary Containment Isolation System (PCIS) manual position switches:
  - a) Describe the switch (e.g., manufacturer, model number, etc.),
  - b) Describe the administrative control features provided for the switch (e.g., handle shape, mechanical or electrical interlocks, keylocked, etc.), and
  - c) Provide the contact/position developments
3. Provide 3 copies of each of the following drawings:
  - a) 729E986,
  - b) 730E927 Sheet 1A and all other sheets that show manual switch developments, and
  - c) The Elementary Diagrams for the high and low pressure emergency core cooling systems and the residual heat removal systems.
4. Describe the location of the reset and bypass switches that are a part of any engineered safety feature circuit. Also provide this information for the switches listed in Question 2 above.
5. Browns Ferry must meet the conditions of General Design Criteria 1, 2, 4 and 23 of Appendix A and Sections III and XI of Appendix B (to 10 CFR Part 50) and the national standards identified in Part II "Acceptance Criteria," of Standard Review Plan Section 3.11 (which includes IEEE Std 323). To ensure that these conditions are met;
  - (1) Provide the information requested in Parts 2 thru 6 below for the following equipment:
    - a) The relay used for 16A-K23 & K24,
    - b) The protective relaying on the output of the RPS motor-generator sets, and
    - c) The radiation monitors that provide an isolation signal to the PCIS.

- (2) For each item listed in Part 1 above, provide the design specification requirements, including:
  - a) The system safety requirements.
  - b) An environmental envelope as a function of time that includes all extreme parameters, both maximum and minimum values, expected to occur during plant shutdown, normal operation, abnormal operation, and any design basis event (including LOCA and MSLB), and post event conditions. The envelope shall include an explicit statement of the range of energy supply and electrical loads.
  - c) Time required to fulfill its safety function when subjected to any of the extremes of the environmental envelope specified in 2(b) above.
- (3) Provide the qualification test plan, test setup, test procedures, and acceptance criteria for each of the items listed in (1) above. If any method other than type testing was used for qualification (operating experience, analysis, combined qualification, or ongoing qualification), describe that method in sufficient detail to permit an evaluation of its adequacy.
- (4) For each piece of equipment identified in (1) above, state the actual qualification envelope simulated during testing (defining the duration of the hostile environment and the margin in excess of the design requirements). If any method other than type testing was used for qualification, identify the method and define the equivalent "qualification envelope" so derived.
- (5) Summarize the test results that demonstrate the adequacy of the qualification programs described above.
- (6) Identify the qualification documents which contain detailed supporting information, including test data, for items (3), (4) and (5) above.

6. For the relays that are listed in Question 5(1) above, provide the following information:

- (1) Manufacturer's name and model number,
- (2) The minimum voltage at which it must operate,
- (3) The voltage at which it was seismically qualified,
- (4) The normal operating voltage, and
- (5) The locations and functions of this type of relay.

Justify the seismic qualification of any relay that was not qualified by test at its minimum operating voltage, or that was not tested in both the energized and de-energized state.