DISTRIBUTION: Docket File NRC PDR Local PDR ORB #2 Rdg. AUG 3 0 1982 D. Eisenhut J. Heltemes, AEOD S. Norris D. Clark OELD I&E NSIC ACRS (10)

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

. 4

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

Dear Mr. Parris:

Subject: Browns Ferry, NUREG-0737, Item III.D.3.4 - Control Room Habitability

Reference is made to your response of July 27, 1982 on the above subject, providing the additional information requested by our letter of February 12, 1982. We have completed our review of your submittals. As discussed in the enclosed safety evalution, we have concluded that the Browns Ferry Nuclear Plant, Unit Nos. 1, 2 and 3, acceptably meets the requirements in NUREG-0737, Item III.D.3.4 on "Control Room Habitability.

Sincerely,

ORIGINAL SIGNED BY

Domenic B. Vassallo, Chief Operating Reactors Branch #2 Division of Licensing

Enclosure As stated

cc: w/enclosure See next page

B207 PDR	300399 8208 ADOCK 05000	30 259	-pa/				
OFFICE	ORB #2	SF #2 2	ORB #2				
	Norris	K720m	Vassallo				
	8/30/.2	102	8/30/82				
AC FORM 318	(10-80) NRCM 0240		OFFICIAL	RECORD C	OPY	1	USGPO: 1981-335-96

cc:

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

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

Resident Inspector U. S. Nuclear Regulatory Commission Route 2, Box 311 Athens, Alabama 35611

Athens Public Library South and Forrest Athens, Alabama 35611

Mr. John F. Cox Tennessee Valley Authority W9-D 207C 400 Commerce Avenue Knoxville, Tennessee 37902

George Jones Tennessee Valley Authority P. O. Box 2000 Decatur, Alabama 35602

James P. O'Reilly Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street, Suite 3100 Atlanta, Georgia 30303



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING

Resolution of NUREG-0737, Item III.D.3.4

"Control Room Habitability"

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

DOCKET NOS. 50-259, 50-260 AND 50-296

1.0 Introduction:

In accordance with NUREG-0737 Task Action Plan Item III.D.3.4, "Control Room Habitability," licensees shall assure that control room operators will be adequately protected against the effects of accidental release of toxic and radioactive gases and that the nuclear power plant can be safely operated or shutdown under design basis accident conditions (Criterion 19, "Control Room," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50).

2.0 Evaluation

In response to the requirements of the Task Action Plan as promulgated in NUREG-0737, TLA submitted a response to Item III.D.3.4 dated March 17, 1981. To resolve one concern, we requested additional information on this subject from TVA in our letter of February 12, 1982. TVA responded to this request by letter dated July 27, 1982.

In accordance with the NUREG-0737 requirements, we evaluated the information provided by TVA against the guidance and requirements of Standard Review Plan Sections 2.2.1, 2.2.2, 2.2.3, and 6.4, and Regulatory Guides 1.78 and 1.95. In its submittals, TVA indicated that no modifications to the control room habitability system were necessary.

Based on our review, we find that the systems will provide safe, habitable conditions within the control room under both normal and accident radiation and toxic gas conditions, including loss-of-coolant accidents. We also conclude that occupancy can be maintained under accident conditions without personnel receiving radiation exposures in excess of 5 rem whole body, or its equivalent to any part of the body, for the duration of an accident. Therefore, we conclude that the design meets the criteria identified in Item No. III.D.3.4, "Control Room Habitability" of NUREG-0737 and thus, acceptably resolves this issue for the Browns Ferry Nuclear Plant, Unit Nos. 1, 2 and 3.

3

Date: August 30, 1982

. 1

Authors: Dick Clark, Harry Krug