NOV 1 0 1982

Docket Nos. 50-259 50-260 and 50-296 Local PDR
ORB#2 Rdg.
D. Eisenhut
J. Heltemes AEOD
S. Norris
D. Clark
OELD
E. L. Jordan
NSIC
J. M. Taylor
ACRS 10
Gray File

Distribution Docket File NRC PDR

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

Dear Mr. Parris:

SUBJECT: NUREG-0737, ITEM II.K.3.24 - ADEQUACY OF SPACE COOLING FOR HPCI

AND RCIC

Re: Browns Ferry Nuclear Plant, Units 1, 2, and 3

We have completed our review of your response of October 4, 1982 to our request for additional information on the above subject. Me conclude that the Browns Ferry Nuclear Plant, Units 1, 2, and 3 complies with the positions in NUREG-0737, Item II.K.3.24 and therefore, this issue is acceptably resolved. A copy of our Safety Evaluation is enclosed.

Sincerely,

Original signed by D. B. Vassallo

Operating Reactors Branch #2 Division of Licensing

Enclosure Safety Evaluation

cc: see next page

8211240410 821110 PDR ADOCK 05000259 PDR

OFFICE DL:ORB#2 DL:ORB#2 DL:ORB#2
SURNAME SURNAME DL:ORB#2 D.Vassallo
11/10/82 11/10/82 11/10/82

cc:

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

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

Mr. Charles R. Christopher Chairman, Limestone County Commission P. O. Box 188 Athens, Alabama 35611

Ira L. Myers, M.D. State Health Officer State Department of Public Health State Office Building Montgomery, Alabama 36104

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

James P. O'Reilly Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street, Suite 3100 Atlanta, Georgia 30303 U. S. Environmental Protection
Agency
Region IV Office
Regional Radiation Representative
345 Courtland Street
Atlanta, Georgia 30308

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

Mr. Oliver Havens U.S. Nuclear Regulatory Commission Reactor Training Center Osborne Office Center, Suite 200 Chattanooga, Tennessee 37411

SAFETY EVALUATION BROWNS FERRY, UNITS 1, 2 AND 3

STAFF POSITION

II.K.3.24 (NUREG-0737) Confirm Adequacy of Space Cooling for High-Pressure Coolant Injection (HPCI) and Reactor Core

Isolation Cooling (RCIC) Systems

Long term operation of the reactor core isolation cooling (RCIC) and high pressure coolant injection (HPCI) systems may require space cooling to maintain the pump-room temperatures within allowable limits. Licensees should verify the acceptability of the consequences of a complete loss of alternating current (AC) power. The RCIC and HPCI systems should be designed to withstand a complete loss of offsite AC power to their support systems, including coolers for at least two hours.

EVALUATION

By letters dated December 30, 1981 and October 4, 1982, the licensee stated that the RCIC system is located in a core spray room. The room is equipped with room coolers that are powered by emergency onsite AC power. The water supply for the coolers comes from the emergency equipment cooling water system which is also powered from the emergency onsite

SAFETY EVALUATION BROWNS FERRY, UNITS 1, 2 AND 3

STAFF POSITION

II.K.3.24 (NUREG-0737) Confirm Adequacy of Space Cooling for

High-Pressure Coolant Injection (HPCI) and Reactor Core

Isolation Cooling (RCIC) Systems

Long term operation of the reactor core isolation cooling (RCIC) and high pressure coolant injection (HPCI) systems may require space cooling to maintain the pump-room temperatures within allowable limits. Licensees should verify the acceptability of the consequences of a complete loss of alternating current (AC) power. The RCIC and HPCI systems should be designed to withstand a complete loss of offsite AC power to their support systems, including coolers for at least two hours.

EVALUATION

By letters dated December 30, 1981 and October 4, 1982, the Licensee stated that the RCIC system is located in a core spray room. The room is equipped with room coolers that are powered by emergency onsite AC power. The water supply for the coolers comes from the emergency equipment cooling water system which is also powered from the emergency onsite AC power.

The HPCI room, which is not equipped with room coolers, is located adjacent to an RHR room that is equipped with emergency powered room coolers. The two rooms are connected by a large equipment passageway. The licensee has performed an analysis which confirms that the ambient space temperature of the room at the end of two hours would be approximately 114°F, well below the allowable temperature limit of the equipment.

Since the HPCI and RCIC systems for Browns Ferry, Units 1, 2 and 3, including their support systems and space coolers, will not be affected by a loss of offsite power, we conclude that the requirements of TMI Action Plan NUREG-0737, Item II.K.3.24 are satisfied.

Dated:

Principal Contributor: T. Chan