Yellow

APR 0 1 1988

Docket Nos. 50-259, 50-260, 50-296
License Nos. DPR-33, DPR-52, DPR-68

Tennessee Valley Authority
ATTN: Mr. S. A. White
Manager of Nuclear Power
6N 38A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Gentlemen:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING
BROWNS FERRY RESPONSE TO IEB 85-03
(DOCKET NOS. 50-259, 50-260, AND 50-296)

Tennessee Valley Authority's letters of May 13 and September 30, 1986 and May 1, 1987, pertaining to Browns Ferry, contained responses to IEB 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients Due to Improper Switch Settings." The review of these responses by the Nuclear Regulatory Commission indicates the need for additional information before the program to assure valve operability can be approved.

Please provide the additional information as stated in the enclosure. It is requested that you submit the additional information within 30 days of the date of this letter. Should you have any questions concerning this letter, please contact S. Tingen at (404) 331-2603.

Sincerely,

for William Little

Kenneth P. Barr, Acting Assistant
Director for Inspection Programs
TVA Projects Division
Office of Special Projects

Enclosure:
Request for Additional Information

cc w/encl:
H. P. Pomrehn, Site Director
Browns Ferry Nuclear Plant
R. L. Gridley, Director
Nuclear Safety and Licensing

(cc w/encl cont'd - See page 2)

IE11

(cc w/encl cont'd)
J. A. Kirkebo, Director,
Nuclear Engineering
M. J. May, Site Licensing Manager
J. G. Walker, Plant Manager
TVA Representative, Rockville Office

bcc w/encl:
J. N. Grace, RII
S. D. Ebneter, OSP
S. D. Richardson, OSP
G. G. Zech, OSP
B. D. Liaw, OSP
W. S. Little, OSP/RII
G. E. Gears, OSP
D. Moran, OSP
A. J. Ignatonis, OSP/RII
A. H. Johnson, OSP/RII
J. Rutberg, OGC
R. Kiessel, NRR
NRC Resident Inspector
DRS Technical Assistant
NRC Document Control Desk
State of Alabama
Document Control Desk

RII
STsugon:tw
03/30/88

RII
for FJape
03/30/88

RII
AHerdt
03/31/88

RII
for AIgnatonis
03/ /88

ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION

1. Revise Table 1 of Enclosure 1 of the response dated September 30, 1986, to include the following MOVs, or justify their exclusion. As required by Action Item a of the bulletin, assume inadvertent equipment operations. How would HPCI or RCIC injection be ensured if these injection valve test valves were to be (a) actuated inadvertently to the closed position upon intended initiation of the system or (b) left closed inadvertently?

   (a) HPCI MOV 73-34 is shown normally open in Zone E-3 of Drawing 47W610-73-1 Revision D, and as MOV 8 on page 68 of BWROG Report NEDC-31322 dated September 1986.

   (b) RCIC MOV 71-37 is shown normally open in Zone E-4 of Drawing 47W610-71-1 Revision B, and as MOV 8 on page 72 of the BWROG Report.

2. Revise Table 1 of Enclosure 1 of the response dated September 30, 1986, to include the following MOVs, or justify their exclusion. According to pages or 58 and 62 of the BWROG Report (for HPCI and RCIC respectively), each of these vacuum breaker line isolation valves has a safety action for closing.

   (a) HPCI MOV 73-64 is shown normally open in Zone F-2 of Drawing 47W610-73-1 Revison D, and as MOV VII on Page 71 of the BWROG Report.

   (b) RCIC MOV 71-59 is shown normally open in Zone G-2 of Drawing 47W610-71-1 Revision B, and as MOV VII on Page 74 of the BWROG Report.

3. Revise Table 1 of Enclosure 1 of the response dated September 30, 1986, to include HPCI MOV 73-36, or justify its exclusion. This CST Test Return Valve is shown normally closed in Zone C-3 of Drawing 47W610-73-1 Revision D, and as MOV 6 on Page 68 of the BWROG Report. According to Page 55 of that report, this valve has no safety action; however, utilities are expected to report differential pressures for testing, per Note "o" on Page 66.

4. Revise Table 1 of Enclosure 1 of the response dated September 30, 1986, to include values of differential pressure for opening the following valves, or justify exclusion of these pressures. How would suction from the CST [items 4(a) and 4(b)] or steam supply to the RCIC Turbine [Items 4(c)] be ensured if these valves were to be (a) actuated inadvertently to the closed position upon intended initiation of the system or (b) left closed inadvertently?

(a) HPCI MOV 73-40 (CST Suction Valve) is shown normally open in Zone B-5 of Drawing 47W610-73-1 Revision D and as MOV 3 on Page 68 of the BWROG Report.

(b) RCIC MOV 71-19 (CST Suction Valve) is shown normally open in Zone C-6 of Drawing 47W610-71-1 Revision B and Page 72 of the BWROG Report.

(c) RCIC MOV 71-9 (Trip and Th ottle Valve) is shown normally open in Zone C-8 of Drawing 47W610-71-1 Revision B, and as MOV X on Page 74 of the BWROG Report.

5. Revise Table 1 of Enclosure 1 of the response dated September 30, 1986, to include values of differential pressure for opening suppression pool suction isolation MOVs 71-17 and 71-18, or justify exclusion of these pressures. According to Page 59 of the BWROG Report, these valves have safety actions for opening and closing. These valves are shown as MOVs 4 and 4a on Page 72 of the BWROG Report.

6. The proposed program for action items b, c and d of the bulletin is incomplete. Provide the following details as a minimum:

(a) commitment to a training program for setting switches and maintaining valve operators,

(b) commitment to justify continued operation of a valve determined to be inoperable,

(c) description of a method possibly needed to extrapolate valve stem thrust determined by testing at less than maximum differential pressure,

(d) justification of a possible alternative to testing at maximum differential pressure at the plant,

(e) consideration of pipe break conditions as required by the bulletin,

(d) stroke testing when necessary to meet bulletin requirements, and

(e) consideration of applicable industry recommendations in the preparation of procedures to ensure maintenance of correct switch settings.