

SEP 28 1992

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

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford, Vice President
Nuclear Assurance, Licensing and Fuels
3B Lookout Place
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Chattanooga, Tennessee 37402-2801

Gentlemen:

SUBJECT: TEMPORARY WAIVER OF COMPLIANCE - BROWNS FERRY UNIT 2

This letter confirms the telephone conversation between Mr. John A. Scalice of your staff and Mr. Paul J. Kellogg of my staff on September 27, 1992, granting a Regional Waiver of Compliance for Browns Ferry Unit 2. Our action was based on information provided during this telephone conference call as well as your written request dated September 27, 1992.

Technical Specification 3.5.B.9, "Residual Heat removal (RHR) System," requires in part, that at least one RHR loop with two pumps be OPERABLE when the reactor vessel is at atmospheric pressure and irradiated fuel is in the reactor vessel. During the current maintenance shutdown of Browns Ferry Unit 2, TVA discovered that repair of a leaking 3/4" test line on RHR Loop I would render that RHR/Low Pressure Coolant Injection (LPCI) loop inoperable. RHR/LPCI Loop II would be in the Shutdown Cooling mode of operation and therefore would not be capable of automatic re-alignment from the Shutdown Cooling mode to the LPCI mode. Since automatic initiation of LPCI would not be available, Loop II would not be considered OPERABLE and thus TVA requested a Temporary Waiver of Compliance of TS 3.5.B.9 for a period of time to conduct this repair not to exceed 60 hours.

We understand that the compensatory measures which would be in effect for the duration of this waiver include the following:

1. Both Core Spray Loops would be maintained OPERABLE.
2. LPCI Loop II would be capable of being re-aligned manually from the RHR Shutdown Cooling mode in an adequate time frame to ensure core cooling requirements for the Cold Shutdown condition.
3. Additional training and procedures would be provided to the operators to ensure that manual re-alignment would take place upon the need for LPCI injection.

This waiver request was reviewed by the Plant Operations Review Committee (PORC) and approved by the Plant Manager. It is our understanding that TVA will submit a formal request for change to the Technical Specifications that will clarify the

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need for LPCI availability and capability in Cold Shutdown for future activities. prior to the restart of Unit 2 from the Cycle 6 refueling outage.

Prior to granting the Temporary Waiver of Compliance, the technical issues and extent of the Waiver were reviewed. They were discussed in a telephone call among E. Merschhoff, C. Patterson, P. Kellogg of RII; T. Ross of NRR; and J. Scalice and P. Salas of TVA and concurred in by J. Partlow of NRR and L. Reyes of RII. This one-time Waiver of Compliance was granted for up to 60 hours based on the justification and compensatory measures documented in your request letter. If you have any questions concerning this letter, please contact us.

Sincerely,

(Original signed by L. Reyes)

Stewart D. Ebnetter
Regional Administrator

Enclosure:
Letter from TVA dated
September 27, 1992

cc w/encl: (See page 3)

Tennessee Valley Authority

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cc w/encl:

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bcc w/encl: (See page 4)

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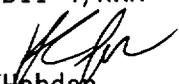
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bcc w/encl:

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PDII-4/NRR


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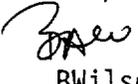
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Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

O. J. 'Ike' Zeringue
Vice President, Browns Ferry Operations

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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-260

BROWNS FERRY NUCLEAR PLANT (BFN) - WAIVER OF COMPLIANCE FOR RESIDUAL HEAT REMOVAL SYSTEM (RHRS) LOW PRESSURE COOLANT INJECTION (LPCI) AND CONTAINMENT COOLING TECHNICAL SPECIFICATION (TS) REQUIREMENTS 3.5.B.9, REVISION 1

BFN Unit 2 was shutdown on September 26, 1992, at 0457 hours to identify and repair components causing an increasing amount of unidentified leakage in the Drywell. Component repairs will render RHR/LPCI loop 1 inoperable during the effort.

In order to maintain the plant in Cold Shutdown the remaining loop needs to be aligned to Shutdown Cooling mode.

The BFN TS do not explicitly recognize the manual re-alignment of the RHRS from Shutdown Cooling to LPCI mode as acceptable for satisfying TS 3.5.B.9. Therefore, in order to affect repairs in the safest manner possible, a TS waiver of compliance is needed.

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During the repair activities both Core Spray loops will be maintained operable, affording approximately 12,500 gal/min makeup water for automatic injection. The RHR loop in shutdown cooling will maintain the availability to be manually realigned and inject in the LPCI mode. Plant operators are currently trained and have procedures which provide for realignment of the RHRS from Shutdown Cooling to LPCI configuration. Plant operators will be rebriefed on the aforementioned procedures prior to utilizing the requested waiver.

The intent of TS 3.5.B.9 is to ensure that, at atmospheric pressure, at least one supply of makeup water is available to the core. Requiring two operable RHR pumps and one operable Core Spray System pump, per TS 3.5.A.4, ensures this redundancy. The safety design basis for the RHRS is that it will operate automatically except when in the Shutdown Cooling Mode. Because of low pressure and low temperature conditions in the Cold Shutdown mode, sufficient time will be available to manually align and initiate LPCI to provide core cooling prior to postulated core uncover. Additional margin has been achieved since all Unit 2 control rods were fully inserted at 0457 on September 26, 1992.

The maintenance and repair activities necessitating this request will be needed only during the repair of components in the affected LPCI loop. This repair activity is expected to last less than 60 hours. TVA is processing a formal request for change to the TS referenced above. The permanent change which is being initiated as a result of a similar waiver of compliance which was approved on February 25, 1992, will clearly identify the need for LPCI availability and capability in Cold Shutdown.

Pursuant to NRC guidance for temporary waiver of compliance, the Plant Operations Review Committee (PORC) has reviewed and approved the waiver request for this activity. The requested action is viewed to have no safety significance because LPCI can be realigned manually from the RHR Shutdown cooling mode in an adequate time frame to ensure core cooling requirements for the Cold Shutdown condition along with both operable Core Spray loops. For this reason TVA has determined that this proposed waiver will not involve a significant increase in the probability or consequences of accident previously evaluated; or create the possibility of a new or different kind of accident from an accident previously evaluated; or involve a significant reduction in a margin of safety. The Proposed No Significant Hazards Consideration is enclosed. Further, this proposed change does not involve any adverse environmental consequences.

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TVA, therefore, requests a verbal approval for a maximum 60-hour temporary waiver of compliance for TS 3.5.B.9 commencing at the time LPCI Loop 1 becomes inoperable and until the above repairs can be completed and the affected LPCI Loop 1 can be considered operable for automatic injection without manual realignment.

Sincerely,



O. J. Zeringue

Enclosure

cc (Enclosure):

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Proposed No Significant Hazards Consideration

The NRC has promulgated standards in 10CFR50.92(c) for determining whether a proposed amendment to a facility operating license involves no significant hazards consideration. A discussion of each of the three standards follows for the proposed waiver of compliance (WOC) for Technical Specifications (TSs) 3.5.B.9:

1. This WOC does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The probability of a previously evaluated accident is not increased because no new accident precursors are introduced, no new operating modes are established and no significant procedure changes are to be promulgated. The consequences of a previously analyzed accident are not increased because adequate core cooling will be assured for two reasons:

- a. Low Pressure Coolant Injection (LPCI) can be realigned in time to perform its function considering current (shutdown since 0457 on September 26, 1992) residual heat loads.
 - b. This change does not change the Core Spray availability requirements in TSs.
2. This WOC does not create the possibility of an accident of a new or different kind than previously evaluated.

There have been no new plant configurations or failure modes introduced.

3. This WOC does not significantly reduce the margin of safety.

The time frame for responding to a requirement for LPCI injection is sufficient for manual operator actions to provide this function so that the fuel temperature does not exceed design limits. Additionally, other safety limits are not potentially compromised.

Environmental Consideration

The proposed WOC has been reviewed against the criteria of 10CFR51.22 for environmental considerations. The proposed change does not involve a significant hazards consideration, nor increase the types and amounts of effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Thus the proposed WOC meets the criteria for categorical exclusion from the requirement for an environmental impact statement.