

*For Docket  
Only*

INITIAL  
NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION  
AND NOTICING ACTION

Docket No. 50-259/260/296  
Licensee: Tennessee Valley Authority  
Request for:

Facility: Browns Ferry Units 1, 2 and 3  
Date of application: March 4, 1982 as modified September 3, 1982 and January 6, 1983

(See attached)

Initial Determination:

- ( ) Proposed determination - amendment request involves no significant hazards considerations (NSHC).
- (XX) Final determination - amendment request involves significant hazards considerations (SHC).

Basis for Determination

- ( ) Licensee's NSHC discussion has been reviewed and is accepted. See attached amendment request.
- (XX) Basis for this determination is presented in the attached notice.
- ( ) Other (state):

(Attach additional sheets as needed.)

Initial Noticing Action: (Attach appropriate notice or input for monthly FRN)

1. ( ) Monthly FRN. Notice of opportunity for hearing (30 days) and request for comments on proposed NSHC determination - monthly FRN input is attached (Attachment 8).
2. ( ) Individual FRN (30 days). Same notice matter as above. Time does not allow waiting for next monthly FRN (Attachments 9a and 9b).

(THIS FORM SHOULD BE TYPED EXCEPT FOR UNUSUAL, URGENT CIRCUMSTANCES.)

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PDR ADOCK 05000259  
P CF

Request for:

Technical Specification changes and a license change to permit reactor operation at power levels of 50% of rated power with one recirculation loop out of service. Presently, the Browns Ferry Units 1, 2 and 3 operating licenses require plant shutdown if an idle recirculation loop cannot be returned to service within 24 hours. The change proposed by the licensee would delete this license condition and modify the Technical Specifications (TSs) to provide for: appropriate Average Power Range Monitor (APRM) flux scram trip and rod block settings; an increase in the safety limit Minimum Critical Power Ratio (MCPR) value; revisions to the allowable Average Planar Linear Heat Generation Rate (APLHGR) values suitable for use with an idle recirculation loop; and the inclusion of APRM flux and core plate pressure drop limits during single loop operation.

Basis:

The Commission has provided guidance for the application of the standards for determining whether a significant hazards consideration exists by providing examples of amendments that are considered not likely to involve significant hazards considerations (48 FR 14870). One such amendment involves a relief granted upon demonstration of acceptable operation from an operating restriction that was imposed because acceptable operation was not yet demonstrated. This assumes that the operating restriction and the criteria to be applied to a request for relief have been established in a prior review and that it is justified in a satisfactory way that the criteria have been met.

The Browns Ferry Units 1, 2 and 3 licenses presently require plant shutdown if an idle recirculation loop cannot be returned to service within 24 hours. This restriction was imposed because insufficient information existed to enable the staff to establish criteria for operation with an idle recirculation loop. Although such criteria have since been established, and analyses have indicated that it should be safe to operate BWRs on a single loop in the range of 85% power, operating experience with an idle recirculation loop at Brown Ferry 1 (BF-1) in late 1978 raised concerns about authorizing single loop operation for BWRs. When the Tennessee Valley Authority (TVA) tried to increase power at BF-1 above about 59% of rated power while operating on a single loop, variations in jet pump flow, neutron flux, and related parameters were noted. Neither the causes nor the potential effects of these variations have been determined or reviewed by the staff for operation with a single recirculation loop. Thus, it has not been justified in a satisfactory way that the criteria for operation with a single loop have been met.

BF-1 has operated at power levels of 50-55% with an idle recirculation loop on several occasions for up to two months. Browns Ferry Units 2 and 3 (BF-2 and BF-3) have operated at power levels above 50% of rated power with an idle recirculation loop for periods of time approaching the 24 hours permitted by the present TSs. However, the application for amendments involves changes which do not completely satisfy the criteria of the applicable example of an amendment which would likely be found not to involve significant hazards considerations. Therefore, the staff has made a determination that the application for amendment may involve a significant hazards consideration.

*preferable in finding that a SHC does exist to use the 3 prongs of 50.92 rather than a single example of what does not raise SHC -- what about all the other examples?*

*this appears to mean that we are going to deny the amendment -- I don't think you mean to say that and should clarify this*

*R.D.  
O.E.D.  
1/9/84*

- 3. ( ) Local media notice. Valid exigent circumstances exist (evaluated below). Local media notice requesting public comments on proposed NSHC determination is attached (Attachment 10).
- 4. ( ) No notice. A valid emergency situation exists (evaluated below) and there is no time for public notice on proposed NSHC determination. (No attachment.)
- 5. ( ) Individual FRN (30-days). Licensee's claim of exigent or emergency circumstances is invalid (evaluated below). Notice of opportunity for hearing (30 days) and request for comments on proposed NSHC determination is attached (Attachments 9a and 9b). Letter of explanation to licensee is also attached.
- 6. ( ) Individual FRN (30-days). The amendment request involves SHC. Notice of opportunity for prior hearing is attached (Attachment 5). Letter to licensee also attached.
- 7. ( ) Individual Short FRN. Valid emergency circumstances exist (evaluated below). There is no time for the usual 30-day FRN. (Attachment 16).

Evaluation of exigent or emergency circumstances (if applicable):

(attach additional sheets as needed)

Approvals:

- |  | <u>Date</u>              |
|--|--------------------------|
| 1. <u>Richard J. Clark</u><br>(Project Manager)                    | <u>December 27, 1983</u> |
| 2. <u>Robert J. Bernman</u> and <u>D. Jassal</u><br>(Branch Chief) | <u>December 27, 1983</u> |
| 3. <u>Richard J. Rowan</u><br>(OELD)                               | <u>1/1/84</u>            |

Additional approval (for noticing actions types 3, 4, 5, 6 and 7):

- |   |                |
|---|----------------|
| 4. <u>J. C. Lai</u><br>(Assistant Director) | <u>1-19-83</u> |
|---|----------------|

Additional approval (for noticing action types 4 and 5):

- |   |       |
|---|-------|
| 5. _____<br>(Director, Division of Licensing) | _____ |
|---|-------|

Attachment: as indicated

cc: Original - Docket File (with note "Docket File only")  
Project Manager  
Licensing Assistant  
Branch Files