

will minimize the need to initiate a unit shutdown or delay start-up when acceptable means are available to ensure the required safety function.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

No. The proposed change does not alter any plant system or operating practice. This change will allow the isolation of the affected flow path such that the safety function is completed when the associated automatic isolation valve is inoperable because of leakage. The containment purge supply and exhaust valves are not considered to be the source of an accident as their function is to isolate containment from the outside environs in the event of an accident. Accident generation probability is not affected by providing alternative isolation methods that continue to satisfy the required safety function. Therefore, the proposed change does not involve an increase in the probability of an accident previously evaluated.

The proposed addition for the isolation of the affected flow path in place of a required shutdown of the unit, provides an equivalent safety function without the risk associated with a unit shutdown. Using a feature that has minimal potential for inadvertent loss of function and a more frequent surveillance to ensure that the isolation function is maintained, is as good or better than the automatic system that is required by the TSs. This is because the proposed action utilizes a passive feature in place of an active system and ensures offsite dose consequences within required limits. Additionally, the overall plant safety is enhanced by not requiring a unit shutdown when acceptable measures can be taken to preserve the safety function of the containment purge supply and exhaust valves. Therefore, the proposed change does not involve an increase in the consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

No. The proposed change does not involve a change to plant systems, components, or operating practices that could result in a change in accident generation potential. In addition, the purge and exhaust valves are utilized for the isolation of flow paths to the environs and are not a feature that could generate a postulated accident. Use of the proposed action for inoperable purge and exhaust valves will not impact the potential for accidents. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

No. The proposed changes do not alter plant systems or their setpoints that are used to maintain the margin of safety. Additionally, the proposed change provides a method to ensure the safety function of the containment ventilation and isolation systems are retained for accident mitigation purposes. The proposed change will improve the margin of safety by not requiring a unit shutdown when acceptable methods for maintaining plant safety functions can be achieved. Therefore, the proposed change does not involve a reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

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NRC Section Chief: Allen G. Howe.

**Tennessee Valley Authority (TVA),
Docket No. 50-390, Watts Bar Nuclear
(WBN) Plant, Unit 1, Rhea County,
Tennessee**

Date of amendment request: May 30, 2003.

Description of amendment request: The proposed amendment would revise the Technical Specifications to replace the single boron concentration requirement with a table that defines the minimum and maximum amount of boron that is required for accident mitigation based on the number of tritium producing burnable absorber rods (TPBARs) in the core.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change modifies the required boron concentration for the cold leg accumulators (CLAs) and RWST [Refueling Water Storage Tank]. The proposed values have been verified to maintain the required accident mitigation safety function for the CLAs and RWST. The CLAs and RWST safety function is to mitigate accidents that require the injection of boric acid water to cool the core and to control reactivity. These functions are not potential sources for accident generation and the modification of the boron concentration that supports event mitigation will not increase the potential for an accident. Therefore, the possibility of an

accident is not increased by the proposed changes. The boron levels for this change are based on the number of TPBARs in the core. As the number of rods is increased the need for additional shutdown boron also increases. This effect has been evaluated with a similar methodology utilized for previously NRC approved amendments associated with tritium production. This methodology ensures that the impact of TPBARs is adequately compensated for by the required boron concentrations and has been incorporated into the proposed revision. Since the boron levels will continue to maintain the safety function of the CLAs and RWST in the same manner as currently approved, the consequences of an accident are not increased by the proposed changes.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change only modifies boron concentrations for accident mitigation functions of the CLAs and RWST. These functions do not have a potential to generate accidents as they only serve to perform mitigation functions associated with an accident. The proposed requirements will maintain the mitigation function in an identical manner as currently approved. There are no plant equipment or operational changes associated with the proposed revision other than the adjustment of the boron level in the CLAs and RWST. Therefore, since the CLA and RWST functions are not altered and the plant will continue to operate without change, the possibility of a new or different kind of an accident is not created.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

This change proposes boron concentration requirements that support the accident mitigation functions of the CLAs and RWST equivalent to the currently approved limits. The proposed change does not alter any plant equipment or components and does not alter any setpoints utilized for the actuation of accident mitigation system or control functions. The proposed boron values have been verified to provide an adequate level of reactivity control for accident mitigation. Therefore, the proposed change will not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

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