

The analysis performed in support of this license amendment request, together with the analyses of the design basis fuel handling accident and weir gate drop reported in previously submitted and NRC approved license amendment requests, includes full scope implementation of AST methodology. This analysis does not represent any change in the post-accident operation of any plant system, structure, or component.

Operation of the facility in accordance with this amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Third Standard

Does operation of the facility in accordance with the proposed amendment involve a significant reduction in the margin of safety?

Margin of safety is related to confidence in the ability of fission product barriers to perform their design functions following any of their design basis accidents. These barriers include the fuel cladding, the Reactor Coolant System, and the containment. The performance of these barriers either during normal plant operations or following an accident will not be affected by the changes associated with the license amendment request.

The AVS is associated with the containment fission product barrier. Its post-accident operation will not be affected by implementation of the amendment to its TS. The operation of the ABFVES either during normal plant operations or following an accident will not be affected by implementation of the amendment to its TS. The operation of the FHVES either during normal plant operations or following an accident will not be affected by implementation of the amendment to its TS. The operation of the CRAVS either during normal plant operations or following an accident will not be adversely affected by the proposed changes to its TS Bases. The operation of Containment Penetrations following an accident will not be adversely affected by the proposed change to its TS.

As noted, an analysis of radiological consequences of the design LOCA at Catawba Nuclear Station has been performed in support of this license amendment request. The design basis LOCA scenarios were selected based on extensive evaluations of Catawba, its design basis, and its anticipated response to a design basis LOCA. Credit was taken only for safety related systems, structures, and components in simulating the mitigation of radiological consequences of the LOCA. Limiting values were taken for performance characteristics of the Class 1E systems modeled in the analysis. The radiological consequences (TEDE radiation doses at the EAB, LPZ, and in the control room) are within the regulatory guideline values with significant margin.

The changes proposed to the VFTP TS for the AVS, ABFVES, and FHVES will not result in a significant reduction in the margin of safety. These changes are supported by regulatory guidance documents, and are consistent with existing system operation. Also, the editorial changes proposed to the VFTP TS will not have any impact on safety.

Operation of the facility in accordance with the proposed amendment does not involve a significant reduction in the 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: John A. Nakoski.

Duke Energy Corporation, Docket Nos. 50-369 and 50-370, McGuire Nuclear Station, Units 1 and 2, and Docket Nos. 50-413 and 50-414, Catawba Nuclear Station, Units 1 and 2, located in Mecklenburg County, North Carolina and York County, South Carolina

Date of amendment request: November 20, 2002, as supplemented January 21, 2003.

Description of amendment request: The proposed amendments would revise the Technical Specifications (TS) for REQUIRED ACTIONS requiring suspension of operations involving positive reactivity additions and various NOTES that preclude reduction in boron concentration. The proposed changes revise these REQUIRED ACTIONS and NOTES to limit the introduction of positive reactivity such that the required margin to criticality, the shutdown margin and refueling boron concentration limits will still be satisfied. The licensee stated that the changes are consistent with the Technical Specification Task Force (TSTF) traveler number 286, Revision 2. Associated changes are also proposed for the TS Bases. *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:

The following discussion is a summary of the evaluation of the change contained in this proposed amendment against the 10 CFR 50.92 (c) requirements to demonstrate that all three standards are satisfied. A "no significant hazards consideration" is indicated if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated, or
2. Create the possibility of a new or different kind of accident from any accident previously evaluated, or

3. Involve a significant reduction in a margin of safety.

First Standard

The proposed changes do not involve any physical alteration of plant systems, structures, or components. The proposed changes revise ACTIONS in the Catawba Nuclear Station (CNS) and McGuire Nuclear Station (MNS) Technical Specifications (TS) that require suspending operations involving positive reactivity additions and several Limiting Condition for Operation (LCO) Notes that preclude reduction in boron concentration. The change revises these ACTIONS and LCO Notes to limit the introduction of reactivity such that the required SHUTDOWN MARGIN (SDM) or refueling boron concentration will still be satisfied. The proposed change ensures that the reactivity condition $[k_{eff}]$ specified in mode definition, the SDM of LCO 3.1.1 and minimum boron concentration requirements of LCO 3.9.1 are met. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated in the updated final safety analysis report (UFSAR) because the accident analysis assumptions and initial conditions will continue to be maintained.

Second Standard

The proposed changes do not involve any physical alteration of plant systems, structures, or components. The proposed changes, which allow positive reactivity additions that do not result in the SDM or the refueling boron concentration being exceeded, do not introduce new failure mechanisms for system structures, or components not already considered in the UFSAR. Therefore, the possibility of a new or different kind of accident from any accident previously evaluated is not created because no new failure mechanisms or initiating events have been introduced.

Third Standard

The proposed changes do not involve a significant reduction in a margin of safety because the ability to make the reactor subcritical and maintain it subcritical during all operating conditions and modes of operation will be maintained. The margin of safety is defined by the SDM of LCO 3.1.1 and minimum boron concentration requirements of LCO 3.9.1. The proposed changes do not affect these operating restrictions and the margin of safety, which assures the ability to make and maintain the reactor subcritical, is not affected.

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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