

The MCPR Safety Limit is one of the limits established to ensure the fuel is protected in accordance with the design basis. The function, location, operation, and handling of the fuel remain unchanged. No changes in the design of the plant or the method of operating the plant are associated with these revised safety limit values. Therefore, no new or different kind of accident from any previously evaluated is created.

3. The proposed change does not involve a significant reduction in a margin of safety.

This change revises the PNPP MCPR Safety Limit values. The new MCPR Safety Limit values reflect changes due to the Cycle 10 core reload, but do not alter the design or function of any plant system, including the fuel. The new MCPR Safety Limit values were calculated using NRC-approved methods described in GESTAR II. The proposed MCPR Safety Limit values continue to satisfy the fuel design safety criteria which ensures that transition boiling does not occur in at least 99.9% of the fuel rods in the core as a result of the postulated limiting transient. Therefore, the proposed values for the MCPR Safety Limit do 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:* Anthony J. Mendiola.

*Indiana Michigan Power Company, Docket No. 50-315, Donald C. Cook Nuclear Plant, Unit 1, Berrien County, Michigan*

*Date of amendment request:* December 10, 2002.

*Description of amendment request:* The proposed amendment would revise the Unit 2 reactor coolant system (RCS) pressure-temperature curves in Technical Specification (TS) Figures 3.4-2 and 3.4-3 and associated TS Bases. The revised curves will bound operation of the unit for the remainder of its current license duration and bound operation with planned license amendments to increase the power level at which the unit is allowed to operate. In support of this proposed amendment, Indiana Michigan Power (I&M) has submitted a request, in accordance with 10 CFR 50.60, "Acceptance Criteria for Fracture Prevention Measures for Lightwater Nuclear Power Reactors for Normal Operation," for exemption from requirements in 10 CFR Part 50, Appendix G, "Fracture Toughness Requirements."

*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 of occurrence or consequences of an accident previously evaluated?

*Response:* No.

Probability of Occurrence of an Accident Previously Evaluated

The proposed change will revise the RCS pressure-temperature curves to reflect new limiting reactor vessel materials, to bound operation of the reactor up to 3600 MWt for the current fuel cycle and beyond, to reflect new fluence analysis methodology, to reflect the use of ASME [American Society of Mechanical Engineers] Code Case N-641, to include boltup limits, and to no longer include instrument uncertainty margins.

The proposed change will not result in physical changes to structures, systems, or components (SSCs), or changes to event initiators or precursors. The proposed change will not affect the ability of personnel to control RCS pressure at low temperatures and, thereby, ensure the integrity of the reactor coolant pressure boundary. Use of Code Case N-641 in developing the proposed revision to the RCS pressure-temperature curves is in accordance with methodologies accepted by the ASME. These methodologies provide assurance that the reactor vessel will withstand the effects of normal cyclic loads due to temperature and pressure changes, and provide an acceptable level of protection against brittle failure.

Additionally, the proposed changes will not impact the design or operation of plant systems such that previously analyzed SSCs will be more likely to fail. The initiating conditions and assumptions for accidents described in the UFSAR [updated final safety analysis report] will remain as previously analyzed. Therefore, the proposed changes will not involve a significant increase in the probability of an accident previously evaluated.

Consequences of an Accident Previously Evaluated

The proposed change does not reduce the ability of any SSC to limit the radiological consequences of accidents described in the UFSAR. The proposed change will not alter any assumptions made in the analysis of radiological consequences of previously evaluated accidents, nor does it affect the ability to mitigate these consequences. No new or different radiological source terms will be generated as a result of the proposed change. Therefore, the proposed changes do not involve a significant increase in the consequences of an accident previously evaluated.

The format changes will improve the appearance of the affected pages but will not affect any requirements. In summary, the probability of occurrence and the consequences of an accident previously evaluated will not be significantly increased.

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

*Response:* No.

The proposed change will not result in physical changes to SSCs. The proposed change will not involve the addition or modification of plant equipment (no new or different type of equipment will be installed) nor will it alter the design of any plant systems. The proposed change solely involves RCS pressure-temperature limits. The types of potential accidents associated with these limits have been previously identified and evaluated. No new accident scenarios, accident or transient initiators or precursors, failure mechanisms, or single failures will be introduced as a result of the proposed changes. No new or different modes of failure will be created. The format changes will improve the appearance of the affected pages but will not affect any requirements. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

*Response:* No.

The proposed RCS pressure-temperature curves will continue to provide adequate margins of protection for the reactor coolant pressure boundary. The proposed changes have been determined, through supporting analyses, to be in accordance with the methodologies and criteria set forth in the applicable regulations, or in accordance with technically adequate alternatives. Compliance with these methodologies provides adequate margins of safety and ensures that the reactor coolant pressure boundary will withstand the effects of normal cyclic loads due to temperature and pressure changes as well as the loads associated with postulated faulted events as described in the UFSAR. The format changes will improve the appearance of the affected pages but will not affect any requirements. Therefore, the proposed change will not significantly reduce 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 requests involve no significant hazards consideration.

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*NRC Section Chief:* L. Raghavan.

*South Carolina Electric & Gas Company, South Carolina Public Service Authority, Docket No. 50-395, Virgil C. Summer Nuclear Station (VCSNS), Unit No. 1, Fairfield County, South Carolina*

*Date of amendment request:* February 25, 2003.

*Description of amendment request:* The proposed Technical Specification