

calorimetric measurement ensures that applicable accident analyses acceptance criteria continue to be met, to support operation at a core power of 3468 MWt. Analyses performed to assess the effects of mass and energy remain valid. The source terms used to assess radiological consequences have been reviewed and determined to bound operation at the uprated condition.

Therefore, the proposed change does not involve a significant increase in the probability or 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?

*Response:* No.

No new accident scenarios, failure mechanisms, or single failures are introduced as a result of the proposed changes. The installation of the Caldon Leading Edge Flow Meter CheckPlus™ system has been analyzed, and failures of this system will have no adverse effect on any safety-related system or any SSCs required for transient mitigation. SSCs previously required for the mitigation of a transient remain capable of fulfilling their intended design functions. The proposed changes have no adverse effects on any safety-related system or component and do not challenge the performance or integrity of any safety-related system.

This change does not adversely affect any current system interfaces or create any new interfaces that could result in an accident or malfunction of a different kind than previously evaluated. Operating at a core power level of 3468 MWt does not create any new accident initiators or precursors. The reduced uncertainty in the feedwater flow input to the power calorimetric measurement ensures that applicable accident analyses acceptance criteria continue to be met, to support operation at a core power of 3468 MWt. Credible malfunctions continue to be bounded by the current accident analysis of record or evaluations that demonstrate that applicable acceptance criteria continue to be met.

Therefore, the proposed changes do 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?

*Response:* No.

The margins of safety associated with this MUR Uprate Program are those pertaining to core power. This includes those associated with the fuel cladding, Reactor Coolant System pressure boundary, and containment barriers. A comprehensive engineering review was performed to evaluate the 1.66 percent increase in the licensed core power from 3411 MWt to 3468 MWt. The 1.66 percent increase required that revised NSSS design thermal and hydraulic parameters be established, which then served as the basis for all of the NSSS analyses and evaluations. This engineering review concluded that no design transient modifications are required to accommodate the revised NSSS design conditions. NSSS systems and components

were evaluated and it was concluded that the NSSS equipment has sufficient margin to accommodate the 1.66 percent power uprate. NSSS accident analyses were evaluated for the 1.66 percent power uprate. In all cases, the evaluations demonstrate that the applicable analyses acceptance criteria continue to be met. As such, the margins of safety continue to be bounded by the current analyses of record for this change.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

In summary, based upon the above evaluation, [Indiana Michigan Power Company] has concluded that the proposed amendment involves no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

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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*Nine Mile Point Nuclear Station, LLC (NMPNS), Docket No. 50-220, Nine Mile Point Nuclear Station Unit No. 1, Oswego County, New York*

*Date of amendment request:* December 19, 2002.

*Description of amendment request:* The proposed amendment would update and clarify the Technical Specifications (TSs) requirements for demonstrating shutdown margin (SDM). The proposed changes incorporate new, more restrictive, SDM limits; add the required limiting condition for operation (LCO) actions if the SDM is not met; and also add the surveillance requirements for verifying the SDM. These LCO actions and surveillance requirements are not currently specified in the TSs. The revised SDM limits account for the uncertainty in the demonstration of adequate SDM analytically or by measurement. The proposed changes also eliminate the unnecessary restriction requiring SDM demonstration in the cold shutdown condition. The option for SDM demonstration in the cold shutdown condition is retained consistent with the existing special test exception.

*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?

*Response:* No.

Adequate SDM provides assurance that inadvertent criticality and potential control rod drop accidents (CRDAs) involving high worth control rods will not cause significant fuel damage. The SDM is not an accident initiator and, as such, will have no effect on the probability of an accident. The proposed changes incorporate more restrictive SDM limits and provide the necessary actions and verifications to assure that there will be no adverse effect on the initial conditions and assumptions of the accidents previously evaluated in the Updated Final Safety Analysis Report (UFSAR). The proposed changes do not involve physical changes to the plant or introduce any new modes of operation. Accordingly, continued assurance is provided that the process variables, structures, systems, and components are maintained such that there will be no degradation of any fission product barrier which could increase the radiological consequences of an accident. Therefore, the proposed changes do not involve a significant increase in the probability or 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?

*Response:* No.

The proposed changes to the SDM limits and requirements will have no adverse effect on the design or assumed accident performance of any structure, system, or component, or introduce any new modes of system operation or failure modes. Moreover, the proposed changes will have no impact on conformance to 10 CFR [Code of Federal Regulations] 50, Appendix A, General Design Criterion 26 (GDC 26), in that the control rods will continue to satisfy the SDM requirements and provide assurance that the reactor can be made subcritical from all applicable operating conditions, transients, and design basis events. Therefore, the proposed changes do 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 changes provide separate SDM limits for testing consistent with the Improved Standard Technical Specifications (NUREG-1433 and NUREG-1434) where the highest worth control rod is determined analytically (0.38% Dk/k) or by measurement (0.28% Dk/k). The proposed SDM limits are more restrictive than the current limit (0.25% Dk/k) and account for the uncertainty in the demonstration of SDM by testing. The SDM will continue to account for changes in core reactivity during the fuel cycle. Therefore, the margin of safety is increased relative to the SDM assumptions for the control rod withdrawal error transient and CRDA analyses.