

and safety-related heat exchangers to meet the design safety functions at the higher temperature. Thus, the proposed change will have no adverse effect on plant operation, or the availability or operation of any accident mitigation equipment. Furthermore, the proposed change cannot cause an accident, nor will the change significantly affect the plant response to any accidents. Therefore, there will be no 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 change will not alter the current plant configuration (no new or different type of equipment will be installed) or require any new or unusual operator actions. The proposed change will not alter the way any structure, system, or component functions and will not cause an adverse effect on plant operation or accident mitigation equipment. The response of the plant and the operators following a design-basis accident is unaffected by the change. The proposed change does not introduce any new failure modes and the design basis heat removal capability of the affected safety-related components is maintained at the increased UHS temperature limit. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any previously analyzed.

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

Response: No.

NMPNS has performed an evaluation of the safety systems to ensure their safety functions can be met with a UHS water temperature of 84 °F. The higher UHS temperature represents a slight reduction in the margins of safety in terms of these systems' abilities to remove accident heat loads. As part of the evaluation, however, it was verified that these safety systems will still be capable of performing their design-basis functions. The proposed change will have no adverse effect on plant operation or equipment important to safety. The plant responses to accidents will not be significantly affected and the accident mitigation equipment will continue to function as assumed in the accident analysis. Therefore, there will be no 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.

Attorney for licensee: Mark J. Wetterhahn, Esquire, Winston & Strawn, 1400 L Street, NW., Washington, DC 20005-3502.

NRC Section Chief: Richard J. Laufer.
Nine Mile Point Nuclear Station, LLC,
Docket No. 50-410, Nine Mile Point Nuclear Station, Unit 2, Oswego County, New York.

Date of amendment request: August 28, 2003.

Description of amendment request: The licensee proposed to change Section 3.1.7, "Standby Liquid Control (SLC) System," of the Technical Specifications (TS) to raise the required average boron concentration in the reactor, resulting from injection of sodium pentaborate solution by the SLC system, to support a transition to the General Electric (GE) 14 fuel design. This design change includes the use of sodium pentaborate solution enriched with the boron-10 isotope. The proposed amendment would add a new surveillance requirement to verify the required boron-10 enrichment of the sodium pentaborate solution prior to addition to the SLC tank. It would also revise the figure that depicts acceptable values of SLC storage tank volume and sodium pentaborate solution concentration by adding a notation regarding the required boron-10 enrichment, and by making a minor adjustment to one of the coordinates that define the Acceptable Operation region on the figure.

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.

The SLC system is designed to provide sufficient negative reactivity to bring the reactor from full power to a subcritical condition at any time in a fuel cycle, without taking credit for control rod movement. The proposed changes to the SLC sodium pentaborate solution requirements maintain the capability of the SLC system to perform this reactivity control function, and assure continued compliance with the requirements of 10 CFR 50.62 for anticipated transients without scram (ATWS). The SLC system is provided to mitigate ATWS events and, as such, is not considered to be an initiator of the ATWS event or any other analyzed accident. The use of sodium pentaborate solution enriched with the Boron-10 isotope, which is chemically and physically similar to the current solution, does not alter the design or operation of the SLC system or increase the likelihood of a system malfunction that could increase the consequences of an accident.

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.

Injection of sodium pentaborate solution into the reactor vessel has been considered in the plant design. The proposed changes revise the SLC boron solution requirements such that the capability of the SLC system to bring the reactor to a subcritical condition without taking credit for control rod movement is maintained, considering operation with an equilibrium core of GE14

fuel. The use of sodium pentaborate solution enriched with the Boron-10 isotope, which is chemically and physically similar to the current solution, does not alter the design, function, or operation of the SLC system. The correct Boron-10 enrichment is assured by the proposed revisions to the TS surveillance requirements. The impact on the solubility limit of enriching the sodium pentaborate solution with the Boron-10 isotope is insignificant; thus, the existing minimum solution and piping temperature specified in the TS will ensure that the boron remains in solution and does not precipitate out in the SLC storage tank or in the SLC pump suction piping. 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?

Response: No.

The proposed changes revise the SLC boron solution requirements to maintain the capability of the SLC system to bring the reactor to a subcritical condition without taking credit for control rod movement. These changes support operation with an equilibrium core of GE14 fuel and assure continued compliance with the requirements of 10 CFR 50.62. The minimum required average boron concentration in the reactor core, resulting from the injection of sodium pentaborate solution by the SLC system, has been determined using approved analytical methods. The analysis demonstrates that sufficient shutdown margin is maintained in the reactor such that the reactivity control function of the SLC system is assured. The additional quantity of boron included to allow for imperfect mixing and leakage is being increased from 20 percent to 25 percent. Thus, additional safety margin is provided to bring the reactor subcritical in the event of an ATWS. Therefore, the proposed change does 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.

Attorney for licensee: Mark J. Wetterhahn, Esquire, Winston & Strawn, 1400 L Street, NW., Washington, DC 20005-3502.

NRC Section Chief: Richard J. Laufer.
Nine Mile Point Nuclear Station, LLC,
Docket No. 50-410, Nine Mile Point Nuclear Station, Unit 2, Oswego County, New York.

Date of amendment request: September 3, 2003.

Brief description of amendments: The proposed change allows entry into a mode or other specified condition in the applicability of a Technical Specification (TS), while in a condition statement and the associated required actions of the TS, provided the licensee