



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 57 TO FACILITY OPERATING LICENSE NO. NPF-69
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION, UNIT 2
DOCKET NO. 50-410

1.0 INTRODUCTION

By letter dated September 2, 1994, Niagara Mohawk Power Corporation (the licensee or NMPC) submitted a request for changes to the Nine Mile Point Nuclear Station, Unit 2, Technical Specifications (TSs). The requested changes would revise TSs 4.7.1.1.1.d.4, 4.7.1.1.1.d.5, 4.7.1.2.1.d.4, and 4.7.1.2.1.d.5 to delete the requirement that the surveillance requirements for demonstrating service water system pump performance and for verifying the integrity of the deicing heaters be performed during shutdown. The amendment would only delete the requirement for performing these surveillances during shutdown; the revised TSs would continue to require that these surveillances be performed at least once per 18 months. The revised TSs would permit these surveillances to be performed during any OPERATIONAL CONDITION.

The licensee informed the NRC staff during a telephone conference call on August 30, 1994, that all of the plant service water system pumps and both divisions of intake deicing heaters had been declared inoperable because TSs Surveillance Requirements 4.7.1.1.1.d.4, 4.7.1.1.1.d.5, 4.7.1.2.1.d.4, and 4.7.1.2.1.d.5 had not been performed at least once per 18 months during shutdown as required by the TSs. Rather, these surveillance requirements had been performed at least once per 18 months during power operations.

The failure to perform the required surveillance requirements during shutdown had been discovered by NMPC personnel at 2:30 p.m. on August 30, 1994. TS 3.0.3 and Action f of 3.7.1.1. require that for the observed inoperability, action be initiated within 1 hour to place the unit in cold shutdown within the following 36 hours. However, TS 4.0.3 provides that these shutdown requirements may be delayed for up to 24 hours when the inoperability is due to failure to perform a surveillance requirement within the allowed surveillance interval. Therefore, initiation of a plant shutdown would have been required by 3:30 p.m. on August 31, 1994.

To preclude the required shutdown, NMPC requested the NRC to exercise its discretion not to enforce compliance with the shutdown requirements of TS 3.0.3 and Action f of TS 3.7.1.1 until this emergency license amendment could be approved by the NRC. The request for this enforcement discretion was initially made during the telephone conference on August 30, 1994. After review of NMPC's verbal request, the NRC staff exercised verbal enforcement



1
2

3
4

5
6

7

8

discretion to NMPC at 10:22 p.m. on August 30, 1994. The verbal request for enforcement discretion was followed up by a written request from NMPC on August 31, 1994, and the NRC staff's verbal enforcement discretion was followed up by written enforcement discretion on September 2, 1994. This enforcement discretion is to remain in effect until issuance of an emergency TS change.

2.0 EVALUATION

TSs 4.7.1.1.1.d and 4.7.1.2.1.d currently each contain five identical test requirements to be performed at least once per 18 months during shutdown with TS 4.7.1.1.1.d being applicable during OPERATIONAL CONDITIONS 1, 2, and 3 while TS 4.7.1.2.1.d is applicable during OPERATIONAL CONDITIONS 4 and 5. The first three test requirements of each of these two TSs currently require verification of automatic functions on simulated test signals. NMPC stated that these test requirements should continue to be performed during shutdown. NMPC verified that these three test requirements have been properly performed in the past during shutdowns. The NRC staff reviewed these testing requirements and concluded that these three tests should continue to be required to be performed during shutdowns. The other two test requirements of TSs 4.7.1.1.1.d and 4.7.1.2.1.d currently concern verification of the service water system pumps performance and verification of deicing heater integrity. These two tests do not verify the flow performance of the service water system. NMPC stated that performance of these two test requirements is unaffected by the operational condition of the unit. The NRC staff reviewed these two testing requirements and concluded that performance of these two test requirements is unaffected by the OPERATIONAL CONDITION of the unit. Therefore, we concluded that performance of these two tests at the specified test frequency in any operational condition provides adequate demonstration of the pumps performance and the integrity of the deicing heaters.

The proposed amendment would restructure the subject surveillance requirements such that the first three requirements of current TSs 4.7.1.1.1.d and 4.7.1.2.1.d would continue to be required to be performed at least once per 18 months during shutdown while the other two tests would be restructured to require their performance at least once per 18 months but with no restrictions on the OPERATIONAL CONDITIONS in which the tests may be performed. We find the proposed changes acceptable since service water system pump performance and deicing heater integrity will continue to be demonstrated at the same frequency (at least once per 18 months) and since performance of these tests is unaffected by the plant's OPERATIONAL CONDITIONS.

3.0 STATEMENT OF EMERGENCY CIRCUMSTANCES

The emergency situation developed at 2:30 p.m. on August 30, 1994, during a review of recent pump curve validation testing on service water system pumps. During this review, NMPC discovered that TSs Surveillance Requirements 4.7.1.1.1.d.4, 4.7.1.1.1.d.5, 4.7.1.2.1.d.4, and 4.7.1.2.1.d.5 were being performed during normal plant operation rather than during shutdown as required by these TSs. Since these surveillance requirements had not been



performed during shutdown (but had been performed at least once per 18 months), all plant service water system pumps and both divisions of intake deicing heaters were declared inoperable. TS 3.0.3 and Action f of TS 3.7.1.1 require that for the observed inoperability, action be initiated within 1 hour to place the unit in COLD SHUTDOWN within the following 36 hours. However, TS 4.0.3 provides that these shutdown requirements may be delayed for up to 24 hours when the inoperability is due to failure to perform a surveillance requirement within the allowed surveillance interval. Therefore, initiation of a plant shutdown would have been required by 3:30 p.m. on August 31, 1994. To preclude the required shutdown, NMPC requested and after NRC staff review, enforcement discretion was exercised to permit continued plant operations. NMPC also committed to submit this proposed emergency TS request. Since the requirement to perform the subject surveillance requirements during shutdown was not recognized until during the review of the pump curve validation testing on August 30, 1994, the circumstances of the request for emergency action could not have been avoided.

4.0 STAFF CONCLUSION

The NRC staff has concluded that the licensee had made a timely amendment application once the problem was recognized. The staff has determined that if enforcement discretion had not been exercised and if the changes are not granted, the plant's TSs require prompt reactor shutdown due to failure to have performed the surveillance requirements during shutdown as required. Therefore, the staff has concluded that the license has justified the need for emergency action, and that the changes are necessary and proper. The proposed changes to the TSs are, therefore, acceptable.

5.0 FINAL NO SIGNIFICANT HAZARD CONSIDERATION

The Commission has proved standards for determining whether a significant hazards consideration exists (10 CFR 50.92(c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration 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 new or different kind of accident from an accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The following evaluation, by the licensee and with which we agree, demonstrates that the proposed amendment does not involve a significant hazards consideration.

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes to the surveillance requirements to permit the operability testing of the service water pumps and the resistance testing of the intake deicing heater system to be performed during any operational condition does not alter any accident initiators or



1
2
3

precursors. Therefore, the proposed changes do not increase the chances for a previously analyzed accident to occur.

The safety function of the service water system is to provide cooling water for various safety related loads during normal operation and accidents. Operational tests of each pump are required to be performed quarterly by the IST [Inservice Testing] program. The proposed change will allow the 18 months operability testing requirement to be performed during any operational condition. The IST tests would be used to satisfy this requirement. The IST tests do not affect the operability of the service water system. The intake deicing heater system provides assurance that the intake will not be clogged by ice during cold weather. The resistance testing of the intake deicing heater system is best performed when the system is not required to be operable. There is no change to the operation of the service water or intake deicing heater systems. Performing these tests during power operation versus shutdown does not affect the ability of these tests to detect degradation.

Therefore, the proposed change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

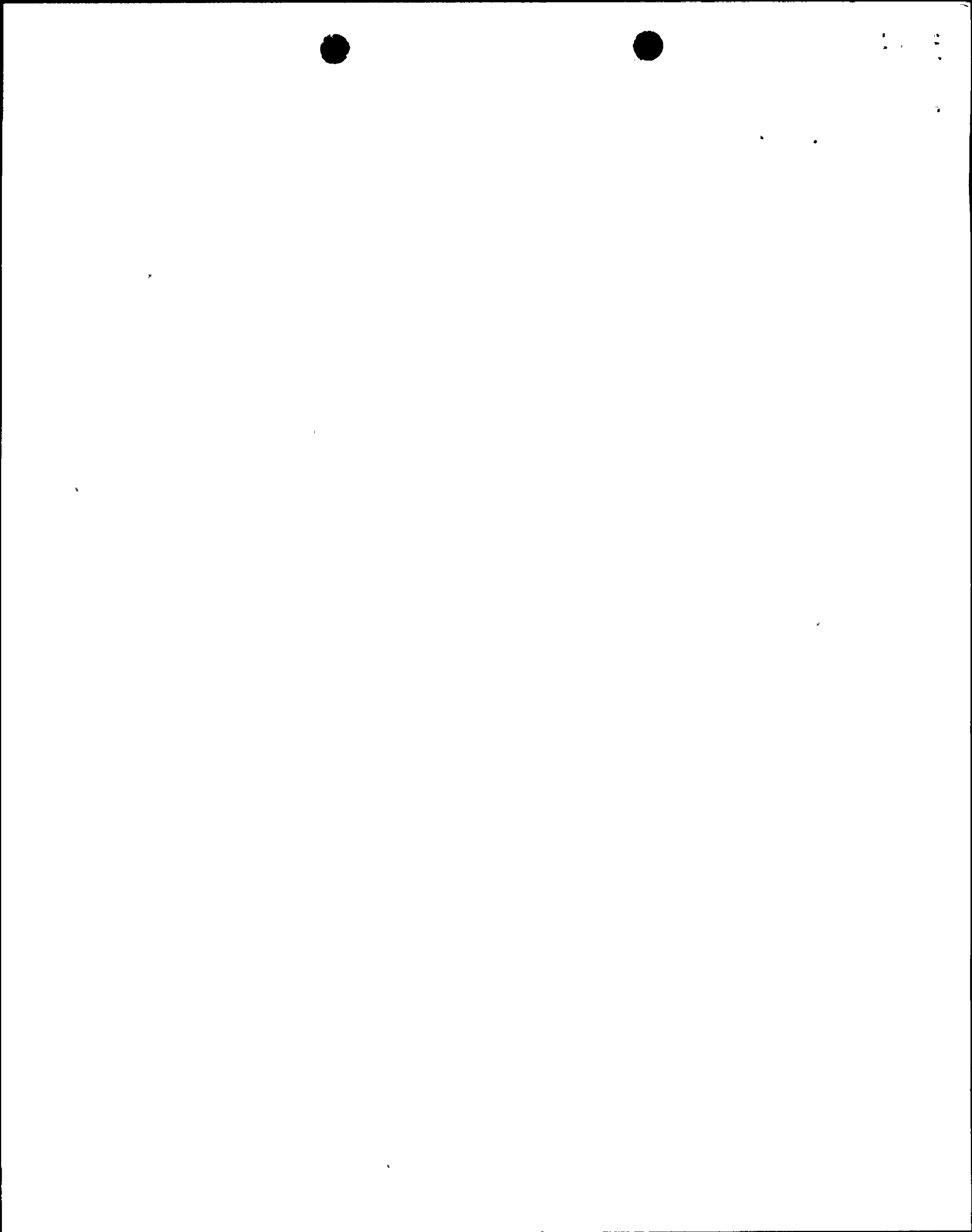
The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not create the possibility of a new or different kind of accident from any previously evaluated.

The proposed amendment to the service water pump operability testing and the resistance testing of the intake deicing heater system will not affect the operation of any safety system or alter its response to any previously analyzed accident. The service water system will continue to be operable during the tests and the resistance testing of the intake deicing heater system can be scheduled for times when the system is not required to be operable. No new plant operating modes are introduced. In the event a service water pump fails the surveillance test, it will be declared inoperable and the actions required for an inoperable service water pump will be performed. Similarly, in the event an intake deicing heater division fails the resistance test, it will be declared inoperable and the action required for an inoperable deicing heater division will be performed.

Therefore, the proposed change will not create the possibility of a new or different kind of accident from any previously evaluated.

The operation of Nine Mile Point Unit 2, In accordance with the proposed amendment will not involve a significant reduction in a margin of safety.

In as much as the service water system remains operable during testing, the proposed amendment will not reduce the availability of the service water system to provide cooling water for safety related equipment. The availability of the system is not affected by performing the operability test during any operational condition. The proposed change will allow



the intake deicing heater system to be tested during warm weather when the system is not required to be operable.

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

6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

7.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final no significant hazards consideration finding with respect to this amendment. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Donald S. Brinkman

Date: September 13, 1994



24-2
A
2