

ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION  
LICENSE NO. NPF-69  
DOCKET NO. 50-410

Proposed Changes to the Technical Specifications

Replace pages 3/4 7-3 and 3/4 7-6 with the attached revised pages. These pages have been retyped in their entirety with marginal markings to indicate the changes.

## PLANT SYSTEMS

### PLANT SERVICE WATER SYSTEM

#### PLANT SERVICE WATER SYSTEM - OPERATING

### SURVEILLANCE REQUIREMENTS

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#### 4.7.1.1.1 (Continued)

e. At least once per 18 months:

1. Perform a LOGIC SYSTEM FUNCTIONAL TEST of the service water pump starting logic.
2. Verify each pump runs and maintains service water pump discharge pressure equal to or greater than 80 psig with a pump flow equal to or greater than 6500 gpm.

#### 4.7.1.1.2 The Intake Deicing Heater System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying the intake tunnel water temperature is greater than or equal to 39°F, or
- b. At least once per 7 days by verifying that the current of the heater feeder cables at the motor control centers is 10 amps\* or more (total for three phases) at  $\geq 518$  volts per divisional heater in each intake structure.
- c. At least once per 18 months by verifying the resistance is  $\geq 28$  ohms for each feeder cable and associated heater elements in the intake deicing heater systems.

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\* For 7 heater elements in operation.

## PLANT SYSTEMS

### PLANT SERVICE WATER SYSTEM

#### PLANT SERVICE WATER SYSTEM - SHUTDOWN

### SURVEILLANCE REQUIREMENTS

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#### 4.7.1.2.1 (Continued)

e. At least once per 18 months:

1. Perform a LOGIC SYSTEM FUNCTIONAL TEST of the service water pump starting logic.
2. Verify each pump runs and maintains service water pump discharge pressure equal to or greater than 80 psig with each pump flow equal to or greater than 6500 gpm.

#### 4.7.1.2.2 The Intake Deicing Heater System shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying the intake tunnel water temperature is greater than or equal to 39°F, or
- b. At least once per 7 days by verifying that the current of the heater feeder cables at the motor control centers is 10 amps\* or more (total for three phases) at  $\geq 518$  volts per divisional heater in each intake structure.
- c. At least once per 18 months by verifying the resistance is  $\geq 28$  ohms for each feeder cable and associated heater elements in the intake deicing heater systems.

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\* For 7 heater elements in operation.

## ATTACHMENT B

### NIAGARA MOHAWK POWER CORPORATION LICENSE NO. NPF-69 DOCKET NO. 50-410

#### Supporting Information and No Significant Hazards Consideration Analysis

##### Introduction

On August 30, 1994, enforcement discretion was verbally granted to provide relief from the requirements of LCO 3.0.3 and Action f for LCO 3.7.1.1. Changes to the Technical Specifications are required to permanently resolve this issue and terminate the need for enforcement discretion.

Nine Mile Point Unit 2 (NMP2) Technical Specification Section 3/4.7.1.1 applies to the service water system during OPERATIONAL CONDITIONS 1, 2 and 3. Specifically, Surveillance Requirement 4.7.1.1.1.d.4 requires that at least once per 18 months during shutdown each service water pump be run and that discharge pressure be equal to or greater than 80 psig with pump flow equal to or greater than 6500 gpm. Surveillance Requirement 4.7.1.1.1.d.5 also requires that at least once per 18 months during shutdown the resistance for each feeder cable and associated heater element in the intake deicing heater system be verified greater than or equal to 28 ohms. The intake deicing heater system is only required to be operable when intake tunnel water temperature is less than 39°F.

Technical Specification Section 3/4.7.1.2 applies to the service water system during OPERATIONAL CONDITIONS 4 and 5. Specifically, Surveillance Requirements 4.7.1.2.1.d.4 & 5 for the shutdown condition are equivalent to 4.7.1.1.1.d.4 & 5, respectively.

Currently, Surveillance Requirements 4.7.1.1.1.d.4 & 5 and 4.7.1.2.1.d.4 & 5 are met with the exception that they were not performed during plant shutdown as specified. Surveillance tests for Surveillance Requirements 4.7.1.1.1.d.4 and 4.7.1.2.1.d.4 are performed at quarterly intervals in accordance with the ASME Section XI Pump and Valve Program.

Niagara Mohawk Power Corporation proposes to revise Surveillance Requirements 4.7.1.1.1.d.4 & 5 and 4.7.1.2.1.d.4 & 5 regarding the operability testing of the service water pumps and resistance testing of the intake deicing heater system. The proposed changes remove the requirement to perform these tests while shutdown and would permit testing to be performed during any operational condition.

The current Technical Specifications require these tests to be performed at least once per 18 months during shutdown. Allowing the pump operability tests to be performed during any operational condition would be consistent with the quarterly testing requirements of ASME Section XI. The service water pump operability test is a pump performance test and not a system flow test. Therefore, it can be performed during any operational

condition. Allowing the resistance tests of the intake deicing heater system to be performed during any operational condition would permit the tests to be scheduled during warmer weather when the system is not required to assure the proper function of the service water system.

#### Description

This amendment proposes to remove the requirements to perform the service water pump operability test and the intake deicing heater system resistance test during shutdown. However, the current surveillance interval of 18 months is retained. The service water pump operability test will be renumbered as Surveillance Requirements 4.7.1.1.1.e.2 and 4.7.1.2.1.e.2 and the resistance testing of the intake deicing heater system will be renumbered as Surveillance Requirements 4.7.1.1.2.c and 4.7.1.2.2.c. These changes will permit the tests to be performed during any operational condition.

#### Existing Surveillance Requirements 4.7.1.1.1.d.4 & 5

At least once per 18 months during shutdown, by verifying:

4. Each pump runs and maintains service water pump discharge pressure equal to or greater than 80 psig with a pump flow equal to or greater than 6500 gpm.
5. The resistance is  $\geq 28$  ohms for each feeder cable and associated heater elements in the intake deicing heater systems.

#### Existing Surveillance Requirements 4.7.1.2.1.d.4 & 5

At least once per 18 months during shutdown, by verifying:

4. Each pump runs and maintains service water pump discharge pressure equal to or greater than 80 psig with each pump flow equal to or greater than 6500 gpm.
5. The resistance is  $\geq 28$  ohms for each feeder cable and associated heater elements in the intake deicing heater systems.

#### Existing Surveillance Requirement 4.7.1.1.1.e and 4.7.1.2.1.e

- e. At least once per 18 months, perform a LOGIC SYSTEM FUNCTIONAL TEST of the service water pump starting logic.

#### Proposed Revision to 4.7.1.1.1.d.4 & 5 and 4.7.1.2.1.d.4 & 5

4. Deleted due to relocation.
5. Deleted due to relocation.

Proposed Revision to 4.7.1.1.1.e

e. At least once per 18 months:

1. Perform a LOGIC SYSTEM FUNCTIONAL TEST of the service water pump starting logic.
2. Verify each pump runs and maintains service water pump discharge pressure equal to or greater than 80 psig with a pump flow equal to or greater than 6500 gpm.

Proposed Revision to 4.7.1.2.1.e

e. At least once per 18 months:

1. Perform a LOGIC SYSTEM FUNCTIONAL TEST of the service water pump starting logic.
2. Verify each pump runs and maintains service water pump discharge pressure equal to or greater than 80 psig with each pump flow equal to or greater than 6500 gpm.

Proposed Addition to 4.7.1.1.2 and 4.7.1.2.2

- c. At least once per 18 months by verifying the resistance is  $\geq 28$  ohms for each feeder cable and associated heater elements in the intake deicing heater systems.

Evaluation

The requirement to verify the operability of the service water pumps by testing the flow and discharge pressure of each pump assures that each pump will meet its specified flow requirements. This requirement can be satisfied by the operational readiness testing required by ASME Section XI. The tests required by the ASME Inservice Testing Program (IST), which is an NRC required program, are performed quarterly. In addition to measuring discharge flow and pressure, the IST program requires performing vibration measurements of the pumps. The purpose of this testing is to verify operational readiness and to identify degradation of the pump performance. The proposed change will allow the once per 18 month operability testing requirement to be performed during any operational condition. There is no difference in the methods used to perform the tests during power operation or during shutdown. Since the pump discharge flow is throttled to achieve the desired flow rate before the pressure is measured, variations in the system lineup downstream of the throttle valve do not affect the test. The service water pumps are tested one at a time and the system remains operable throughout the performance of the test.

The purpose of the resistance testing is to check for long-term degradation of the circuit insulations. The resistance testing of the intake deicing heater system is performed by opening the breakers which makes the division being tested inoperable. This test is best performed when the system is not required to be operable. The system must be operable



when the intake tunnel water temperature is less than 39°F. Since shutdowns can occur at any time of the year, it is best to schedule this test during the warmer weather months. Relocating these surveillance tests to 4.7.1.1.2.c and 4.7.1.2.2.c groups them with other tests of the intake deicing heater system and permits testing to be performed when the system is not required to be operable. Plant operating conditions have no effect on the ability of the resistance test to detect long-term degradation. Performing these surveillance tests when the intake deicing heater system is not required to be operable is a safety enhancement.

### Conclusion

The proposed amendment 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 is justified. The tests performed during operation are the same as the tests performed during shutdown. The service water pump operability test is a pump performance test and not a system flow test. Therefore it can be performed during any operational condition. The operability and availability of these systems are not affected by the change. Therefore, there is reasonable assurance that the operation of Nine Mile Point Unit 2 in the proposed manner will not endanger the public health and safety.

10CFR50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10CFR50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10CFR50.91, the following analysis has been performed:

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 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 program. The proposed change will allow the 18 month 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.



## ATTACHMENT C

### NIAGARA MOHAWK POWER CORPORATION LICENSE NO. NPF-69 DOCKET NO. 50-410

#### Explanation of Why Emergency Occurred and Why it Could Not be Avoided

The Technical Specifications require the performance of Surveillance Requirement 4.7.1.1.1.d.4 at least once per 18 months during shutdown. In addition, this surveillance test is also performed at quarterly intervals in accordance with the ASME Section XI Pump and Valve Program. On August 30, 1994 during a review of recent pump curve validation testing on service water pumps, NMPC discovered that Surveillance Requirements 4.7.1.1.1.d.4 and 4.7.1.2.1.d.4 were being performed during plant operation rather than during shutdown. In addition, NMPC discovered that Surveillance Requirements 4.7.1.1.1.d.5 and 4.7.1.2.1.d.5 were being performed during plant operation rather than during shutdown. However, except for the requirement to perform these surveillances in the shutdown condition, these four Surveillance Requirements have been performed within the last 18 months in accordance with Technical Specification requirements. After discussion with the NRC, enforcement discretion was verbally granted on August 30, 1994. Niagara Mohawk committed to submit an application for an emergency Technical Specification amendment to support continued operation. With this filing, the licensee has made timely application for this emergency amendment.

Surveillance Requirement 4.0.3 states that the ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Therefore, failure to perform Technical Specification Surveillance Requirements 4.7.1.1.1.d.4 and 4.7.1.1.1.d.5 would have required entry into LCO 3.0.3 at 14:30 hours on August 31, 1994. This would have required NMP2 be in cold shutdown within 37 hours upon entering LCO 3.0.3. In addition, if intake tunnel water temperature were less than 39°F, then NMP2 would have been required to be in cold shutdown within 37 hours in accordance with Action f of LCO 3.7.1.1.

LCO 3.7.1.1 requires the intake deicing heater system to be OPERABLE and in operation when intake tunnel water temperature is less than 39°F. Since the current intake tunnel water temperature is approximately 68°F, failure to perform Surveillance Requirement 4.7.1.1.1.d.5 does not require a shutdown of the unit. However, operational experience has demonstrated that the lake can quickly turn over due to a change in wind direction, thereby producing a rapid reduction in intake tunnel water temperature of up to approximately 26°F within a few hours.

Our preliminary investigation has determined that the procedures which implement 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 did not properly reflect the requirement that these surveillances must be performed while the unit is shut down. Niagara Mohawk thus, due to this error, did not anticipate or avoid the situation leading up to this request. The investigation is continuing in accordance with Niagara Mohawk's Deviation Event Reporting process.

Niagara Mohawk requests that this application for amendment be considered an emergency situation in order for Nine Mile Point Unit 2 to continue operation in accordance with 10CFR50.91 and that prior notice for opportunity for a hearing be waived.

ATTACHMENT D

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Environmental Considerations

This amendment involves a change to a requirement to perform certain tests during shutdown. The changes to revise Surveillance Requirements 4.7.1.1.1.d.4 & 5 and 4.7.1.2.1.d.4 & 5 will permit these tests to be performed during any operational condition.

Operational readiness testing of the service water pumps is already performed quarterly in accordance with the IST program. This change does not alter the method of testing or increase the test frequency.

Resistance testing of the intake deicing heater system makes the division being tested inoperable. The proposed change allows the testing to be performed when the plant is operating and the system is not required to be operable. There is no change to the method of testing.

Niagara Mohawk has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluent that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. Niagara Mohawk has determined that this amendment involves no significant hazards consideration. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). Pursuant to 10CFR51.22(b), no environmental impact statement nor environmental assessment need be prepared in connection with the issuance of this amendment.