ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION

LICENSE NPF-69

DOCKET NO. 50-410

Proposed Changes to Technical Specifications

Replace existing pages 3/4 7-1, 3/4 7-2, 3/4 7-4 and 3/4 7-5 with the attached revised pages. These pages have been retyped in their entirety with marginal marking to indicate the change to the text.

3/4.7.1 PLANT SERVICE WATER SYSTEM

PLANT SERVICE WATER SYSTEM - OPERATING

LIMITING CONDITIONS FOR OPERATION

3.7.1.1 Two independent plant service water system loops shall be OPERABLE with one loop in operation. Each loop shall be comprised of:

a. Two plant service water pumps capable of taking suction from Lake Ontario and transferring the water to the associated safety related equipment.

b. Service water supply header discharge water temperature of 81°F or less.

The intake deicing heater system shall be OPERABLE and in operation when intake tunnel water temperature is less than 39°F; Division I shall have 7 heaters in operation in each intake structure and Division II shall have 7 heaters in operation in each intake structure.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3

ACTION:

a. With one less than the required number of OPERABLE plant service water pumps in one loop, restore the inoperable pump to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With one less than the required number of OPERABLE plant service water pumps in each loop, restore at least one inoperable pump to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

c. Within two less than the required number of OPERABLE plant service water pumps in one loop or with one plant service water loop otherwise inoperable, restore at least one pump to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

d. With two less than the required number of OPERABLE plant service water pumps in one loop and one less than the required number of plant service water pumps in the other loop, restore at least one of the two inoperable pumps in the same loop to OPERABLE status within 12 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

e. With two plant service water system loops OPERABLE and the service water supply header discharge water temperature continuously exceeding 81°F for any 8 hour period, within one hour initiate action to be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

PLANT SERVICE WATER SYSTEM

PLANT SERVICE WATER SYSTEM - OPERATING

LIMITING CONDITIONS FOR OPERATION

3.7.1.1 (Continued)

ACTION:

f. With less than the required Division I and Division II heaters OPERABLE within one hour initiate action to be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.1.1 The plant service water system shall be demonstrated OPERABLE.

a. By verifying the plant service water supply header discharge water temperature to be less than or equal to 81°F.

    1. At least once per 24 hours, and

    2. At least once per 4 hours when the last recorded water temperature is greater than or equal to 75°F, and

    3. At least once per 2 hours when the last recorded water temperature is greater than or equal to 79°F.

b. At least once per 12 hours by verifying the water level at the service water pump intake is greater than or equal to elevation 233.1 feet.

c. At least once per 31 days by verifying that each valve - manual, power-operated, or automatic, servicing safety-related equipment that is not locked, sealed or otherwise secured in position - is in its correct position.

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

    1. After a simulated test signal, each automatic valve servicing nonsafety-related equipment actuates to its isolation position.

    2. After a simulated test signal, each service water system cross connect and pump discharge valve actuates automatically to its isolation position.

    3. For each service water pump, after a simulated test signal, the pump starts automatically and the associated pump discharge valve opens automatically, in order to supply flow to the system safety-related components.

PLANT SERVICE WATER SYSTEM

PLANT SERVICE WATER SYSTEM - SHUTDOWN

LIMITING CONDITIONS FOR OPERATION

3.7.1.2 Two independent plant service water system loops shall be OPERABLE with one loop in operation. Each loop shall be comprised of:

a. Two OPERABLE plant service water pumps capable of taking suction from Lake Ontario and transferring the water to the associated safety-related equipment.

b. Service water supply header discharge water temperature of 81°F or less.

The intake deicing heater system shall be OPERABLE and in operation when intake tunnel water temperature is less than 39°F; Division I shall have 7 heaters in operation in each intake structure and Division II shall have 7 heaters in operation in each intake structure.

APPLICABILITY: OPERATIONAL CONDITIONS 4 and 5.

ACTION:

a. With one less than the required number of OPERABLE plant service water pumps in one loop, restore the inoperable pump to OPERABLE status within 30 days or declare the associated safety-related equipment inoperable and take ACTIONS required by Specifications 3.5.2 and 3.8.1.2.

b. With one less than the required number of OPERABLE plant service water pumps in each loop, restore at least one inoperable pump to OPERABLE status within 7 days or declare the associated safety-related equipment inoperable and take ACTIONS required by Specification 3.5.2 and 3.8.1.2.

c. With two less than the required number of OPERABLE plant service water pumps in one loop, restore at least one inoperable pump to OPERABLE status within 72 hours or declare the associated safety-related equipment inoperable and take ACTIONS required by Specification 3.5.2 and 3.8.1.2.

d. With two less than the required number of OPERABLE plant service water pumps in one loop and one less than the required number of plant service water pumps in the other loop, restore at least one of the two inoperable pumps in the same loop to OPERABLE status within 12 hours or declare the associated safety-related equipment inoperable and take ACTIONS required by Specification 3.5.2 and 3.8.1.2.

e. With the service water supply header discharge temperature exceeding 81°F suspend CORE ALTERATIONS and all operations that have a potential for draining the reactor vessel.

PLANT SERVICE WATER SYSTEM - SHUTDOWN

LIMITING CONDITIONS FOR OPERATION

3.7.1.2 (Continued)

ACTION:

f. With less than the required Division I and Division II heaters OPERABLE, suspend CORE ALTERATIONS and all operations that have a potential for draining the reactor vessel.

SURVEILLANCE REQUIREMENTS

4.7.1.2.1 The plant service water system shall be demonstrated OPERABLE:

a. By verifying the plant service water supply header discharge water temperature to be less than or equal to 81°F:

   1. At least once per 24 hours, and

   2. At least once per 4 hours when the last recorded water temperature is greater than or equal to 75°F, and

   3. At least once per 2 hours when the last recorded water temperature is greater than or equal to 79°F.

b. At least once per 12 hours by verifying the water level at the service water pump intake is greater than or equal to elevation 233.1 feet.

c. At least once per 31 days by verifying that each valve - manual, power-operated, or automatic, servicing safety-related equipment that is not locked, sealed, or otherwise secured in position - is in its correct position.

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

   1. After a simulated test signal, each automatic valve servicing nonsafety-related equipment actuates to its isolation position.

   2. After a simulated test signal, each service water system cross connect and pump discharge valve actuates automatically to its isolation position, and

   3. For each service water pump, after a simulated test signal, the pump starts automatically and the associated pump discharge valve opens automatically, in order to supply flow to the system safety-related components.

ATTACHMENT B

NIAGARA MOHAWK POWER CORPORATION

LICENSE NPF-69

DOCKET NO. 50-410

Supporting Information and No Significant Hazards Consideration Analysis

INTRODUCTION

The original design basis of the Service Water System (SWP) is 77°F (see Final Safety Analysis Report, Section 2.4.11.5 and 9.2.1.2). To provide margin to account for instrumentation accuracies, and to allow for operator action in the event temperature approached the design limit, the Nuclear Regulatory Commission staff imposed a Technical Specification limit on the service water temperature of 76°F (see Safety Evaluation Report, NUREG 1047, Section 2.4.11.2).

Service water temperature exceeded 76°F at 1:00 a.m. on July 13, 1987. The Unit had been shut down for scheduled maintenance, so operation was not affected. Service water temperature again exceeded 76°F on the mornings of July 18 and 19.

On July 22, 1987, the Nuclear Regulatory Commission acted upon Niagara Mohawk's emergency application for a license amendment to raise the Technical Specification service water supply discharge header temperature limit from 76°F to 77°F. Service water temperature has since continued to trend upward, and periodically exceeded 77°F on July 23, 24 and 25, resulting in a forced shutdown on July 25.

Niagara Mohawk has just completed analyses supporting a service water system design basis temperature of 82°F. Allowing for the same 1°F margin as utilized by the staff, these analyses support increasing the Technical Specification service water supply header discharge temperature limit to 81°F.

The safety-related systems and equipment supplied with cooling water from the service water system are:

- Standby Emergency Diesel Generators (Division I, II and III)
- Hydrogen Recombiners
- Spent Fuel Pool Cooling Heat Exchangers
- Residual Heat Removal Pump Seal Coolers
- Category I Unit Coolers and Chillers
- Residual Heat Removal Heat Exchangers

Each accident and transient evaluation addressed in the Unit 2 FSAR was assessed for impact due to increasing service water temperature to 82°F. The only dependence on service water temperature is with regard to the suppression pool temperature. To demonstrate that the suppression pool temperature response presented in the FSAR remains unaffected, the following analyses were assessed against a service water temperature of 82°F.

- Post-accident containment response (FSAR Section 6.2.2)
- NUREG 0783 SRV transient pool temperature response (FSAR Section 6A.10)
- Failure of RHR shutdown cooling (FSAR Section 15.2.9)

Additional safety analyses where service water temperature possibly could affect analytical results are:

- Equipment Qualification
- Service water pipe stress/pipe support analyses

This safety evaluation addresses the impact of increased service water temperature on each of these systems and analyses.

DISCUSSION

The applicable design information for each of the systems specified has been reviewed and compared against a service water temperature of 82°F.

Diesel Generators

Service water provides cooling water for the jacket water subsystems (see FSAR Section 9.5.5). The Division I and II diesels are rated for 82°F service water temperature per FSAR Section 9.5.5.2.1 and the Division III diesel is rated for 95°F service water temperature per FSAR Section 9.5.5.2.2. Therefore, an increase in service water temperature from 77°F to 82°F will not impact diesel performance since the 82°F condition is already bounded by their design as documented in the Unit 2 FSAR.

Hydrogen Recombiners

The hydrogen recombiners utilize service water to cool the recombiner exhaust gas stream by means of a water spray aftercooler. The purpose of cooling the recombiner exhaust gas is to protect the concrete surrounding the penetration through which the exhaust gases pass to re-enter the primary containment. Typical concrete temperature limits are specified in Section III, Division 2 of the ASME Code in Subsection CC-3440. The ASME Code specifies a temperature limit for concrete during accident conditions of 350°F. In order to assure adequate margin, temperature switches (2HCS*TSH18A and B) alarm and trip the recombiner units at a recombiner exhaust gas temperature of 250°F. The recombiner aftercooler sizing is based upon 180°F supply water. Therefore, raising the service water temperature limit from 77°F to 82°F does not compromise the integrity of the concrete surrounding the penetration through which the exhaust gases pass.

Spent Fuel Pool Cooling Heat Exchanger

The service water system provides cooling to the spent fuel pool heat exchangers only under emergency conditions. Under normal conditions, these heat exchangers are supplied by the reactor building closed loop cooling system with a maximum cooling water inlet temperature of 95°F. The design duty of the heat exchangers is based on an inlet temperature of 95°F as documented in the Nine Mile Point Unit 2 FSAR Table 9.1-6. Therefore, an increase in service water temperature from 77°F to 82°F is bounded by the current Unit 2 analyses, and would have no adverse impact on the heat removal capability of the spent fuel pool cooling heat exchangers.

Residual Heat Removal Pump Seal Coolers

The residual heat removal pump seal coolers are designed for a maximum cooling water temperature of 105°F to ensure adequate protection for the pump seals. Therefore, an increase in service water temperature to 82°F would have no impact on the operation of these coolers.

Reactor Building Closed Loop Cooling Water System

The non-safety related Reactor Building Closed Loop Cooling Water (RBCLCW) system provides cooling water to various reactor plant equipment. The major heat loads cooled by RBCLCW include the spent fuel pool heat exchangers, RWCU non-regenerative heat exchangers, reactor recirculation pump seal coolers, reactor recirculation pump motor winding and bearing coolers, drywell unit coolers and equipment drain coolers.

The RBCLCW heat exchangers are cooled directly by the SWP system. These heat exchangers are designed to supply RBCLCW at 95°F when the exchangers are operating at maximum design duty with a maximum SWP temperature of 77°F. All equipment cooled by RBCLCW are sized for an inlet temperature of at least 95°F.

An analysis has been performed for the RBCLCW heat exchangers to evaluate their heat removal capability with 82°F SWP inlet temperature. This analysis demonstrates that even when the maximum system heat load is imposed upon the RBCLCW heat exchangers, a RBCLCW supply temperature of less than or equal to 95°F can be maintained.

Since the RBCLCW supply temperature can be maintained at or below 95°F for all anticipated conditions, there will be no impact on the performance capabilities of the equipment serviced by the RBCLCW system when cooled by 82°F SWP.

Category I Unit Coolers and Chillers

Category I chillers provide chilled water for cooling of the control room, relay room, computer room, and remote shutdown room air-conditioning units. The chiller design capacity is 140 tons as verified by vendor test data utilizing 81°F service water. This capacity exceeds the calculated duty by more than 20%. Given this margin in capacity, the environment controlled by the chillers' performance is not adversely affected by the increase in service water temperature to 82°F.

Service water is also used as the cooling medium for unit coolers on various Category I ventilation systems. The various unit coolers, fans and cooling coils were originally designed with a 10-25% margin above the conservatively calculated maximum heat gains. The cooling coils are designed for a maximum inlet temperature of 200°F, while a maximum service water temperature of 77°F was used to establish the heat removal capability of the units. An analysis was performed to determine the impact of 82°F service water temperature on average and normal maximum area temperatures.

The revised analysis took credit for some of the conservatisms in the original analysis. The original calculated heat loads were based on rated equipment electrical loads. The revised analysis based heat loads on actual equipment loads as supported by test data. The new analysis demonstrates that, with the exception of three mild environment zones in the control building, expected area normal maximum temperature will not exceed design normal maximums per the Equipment Qualification Environmental Design Criteria, EQEDC (with 82°F service water). The areas in the control building where design normal maximum temperatures are exceeded are evaluated under the Equipment Qualification section below.

Average area temperatures are also unaffected by the increased service water temperature. Average area temperatures are based on long-term average winter and average summer temperatures. Since temperatures approaching 82°F would be expected for only a few days on an infrequent yearly basis, the increased service water temperature will have a negligible effect on average area temperatures.

Environmental Qualification

Equipment qualification for normal life is based on average area temperatures. As stated above, average area temperatures are unaffected by maximum service water temperature, so normal component life expectancy is not affected.

Equipment qualification for normal life also requires that equipment retain its qualification when subjected to maximum normal service temperatures for limited periods. With the exception of the three zones in the control building, all areas remain within their design normal maximum temperatures, and equipment within these areas retains its qualification.

The three mild environment zones in the control building where design normal maximum temperatures are affected are the Division I and II cable areas and Division I riser area, all located on elevation 237'. The currently specified design normal maximum temperature for these mild zones is 104°F. The new calculated maximum temperatures, based on 82°F service water, are 107°F, 106.4°F and 108°F, respectively. All environmentally qualified equipment located in these zones was identified and the qualification documentation was reviewed.

Based on vendor supplied qualification data, all equipment in these zones is qualified to temperatures higher than the new calculated maximum temperatures stated above. The minimum margin for any component reviewed was 10°F for multiplexers mounted on panels 2CES*PNL517 and 2CES*PNL519 in the Division I and II cable areas. The multiplexer itself was qualified to 122°F. Vendor test data established the maximum internal heat rise in the panel at less than 5°F, which results in a minimum external ambient qualified temperature of 117°F. The remaining components in the three zones were all qualified to a minimum external ambient temperature of 120°F. The results of the review of the qualification documentation demonstrate that equipment qualification is maintained at the higher calculated normal maximum ambient temperature.

Qualification for abnormal conditions is based on peak abnormal temperatures expected during transients. The analysis assumes temperature is at the normal average temperature at the start of an abnormal event. Normal average area temperatures are not affected by the increased service water temperature; therefore, qualification during abnormal events is maintained.

Peak temperatures for accident conditions are determined assuming temperatures are initially at the design normal maximum. For Nine Mile Point Unit 2, qualification for accident conditions is only applicable to harsh environment areas. As described above, design normal maximum temperatures for harsh areas are not affected by the increased service water temperatures. Therefore, qualification for accident conditions is maintained with 82°F service water.

<u>Secondary Containment Response</u>

Secondary containment drawdown time is governed by reactor building unit cooler heat removal capability. The heat removal capability is determined by the temperature difference between service water and reactor building average air temperature, not maximum service water temperature. Since this temperature difference is administratively maintained within its design limit, increasing the maximum service water temperature will not affect the secondary containment drawdown.

<u>Residual Heat Removal Heat Exchangers</u>

There are four post-accident containment response analyses (large, intermediate, and small break accident and steam bypass analyses) and one NUREG 0783 Safety Relief Valve transient analysis which are affected by an increase in service water temperature. These analyses are discussed in FSAR Chapter 6.2 and Appendix 6A.10.

<u>Post-Accident Containment Response</u>

The four post-accident containment response analyses were performed based upon a service water temperature of 77°F (Table 6.2-6, item 6.b, in the FSAR) and a RHR heat exchanger k factor of 199 BTU/SEC/°F.

A calculation was performed utilizing 82°F service water and a revised k factor of 239. The higher value of k is based on improved heat exchanger performance data provided by General Electric, the equipment supplier. The calculation uses the flow rate for the RHR containment spray mode which is the governing mode for containment response. It also assumes 5% tube plugging. As a result of the new k values, the increase in the heat removal capability more than offsets the increased service water temperature such that the post-accident containment responses depicted in FSAR Section 6.2 remain valid.

NUREG 0783 SRV Transient Pool Temperature Response

The NUREG 0783 analysis was updated in Amendment 21 of the FSAR to reflect a service water temperature of 81°F and a k factor of 239. The analysis has been revised using 82°F SWP and a k factor of 248. This revised k factor is also based on the latest General Electric data and the flow rate in the RHR suppression pool cooling mode, which is the governing mode for this transient response analysis.

Based on this improved heat exchanger performance, the results for the most limiting SRV transient, isolation/scram, shown in Table 6A.10-1 still bounds the results of the new analysis using 82°F service water. Therefore, operation with 82°F service water related to NUREG 0783 transients is acceptable and bounded by the current licensing basis.

Failure of RHR Shutdown Cooling (Alternate Shutdown Cooling)

The original Alternate Shutdown Cooling (ASC) transient analysis, documented in FSAR Section 15.2.9, assumed a maximum service water temperature of 77°F and a heat exchanger k factor of 199 BTU/SEC/°F.

A sensitivity analysis was performed on the original transient analysis to determine the overall effect of increasing service water temperature to 82°F. The sensitivity analysis takes credit for the increased k factor for the RHR heat exchanger identified in the post-accident containment response evaluation discussed above.

The results of the sensitivity analysis show that the increased k factor more than offsets the effects of 82°F service water. The heat removal capability of the heat exchanger is greater with the revised parameters, and the new ASC evaluation is bounded by the original FSAR evaluation. Therefore, an increase in service water design temperature to 82°F will not affect the evaluation of shutdown cooling.

Pipe Stress/Pipe Supports

The effect of a 5°F increase (from 77°F to 82°F) in service water temperature on the service water piping system, including the components serviced by the service water, was evaluated in accordance with ASME Section III Code. Increased thermal stresses, including the increased thermal nozzle loads, were calculated and found to be within ASME Section III and vendor allowables. Analysis of the RHR piping system was not required since, due to the increased heat transfer capabilities of the RHR heat exchangers, maximum RHR system temperatures remain unaffected.

The increased thermal loads on all service water pipe supports were calculated using the thermal load factor from the pipe stress calculation. The new thermal loads were evaluated against the stress allowables for Normal/Upset Load Condition 3. Results of this reanalysis demonstrate that all pipe supports for the service water system are within ASME Section III stress allowables.

CONCLUSION

Nine Mile Point Unit 2 can be safely operated with a service water temperature of 82°F. Current design analyses support safe operation at this temperature. A Technical Specification limit of 81°F provides sufficient margin to account for the 0.6°F accuracy of the monitoring instrumentation. Therefore, safe operation of Nine Mile Point Unit 2 can be assured with a Technical Specification service water limit of 81°F.

The increase in service water temperature does not impact the LOCA Peak Fuel Clad response analysis, the operating CPR limits, or the limiting transients analyses described in the FSAR. There is no impact on the radiological releases as specified in the 10 CFR 50 Appendix I analysis. Finally, the results of the ATWS evaluation remain valid.

10 CFR 50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10 CFR 50.92 concerning the issue of no significant hazards considerations. Therefore, in accordance with 10 CFR 50.91, 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 amendment involves increasing the plant service water system operating temperature limit in the Technical Specifications from 76°F to 81°F. All components cooled by the plant service water system have been evaluated and been found to be able to perform their intended function under normal operation, shutdown, abnormal and accident conditions with a service water temperature of up to 82°F. Further, the proposed change does not adversely affect the environmental qualification of any plant equipment, nor does it impact post-accident containment response. By the determination that the suppression pool is not affected in the post-accident containment response, assurance is provided that the LOCA analysis also remains valid. Finally, the integrity of the service water system is not affected. In summary, increasing the plant service water operating temperature limit to 81°F 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 accident previously evaluated.

The containment post-accident response to previously evaluated accidents remains within previously assessed limits of temperature and pressure. This also applies to the LOCA analysis. Further, all safety-related systems and components remain within their applicable design limits. Thus, system and component performance is not adversely affected by this change, thereby assuring that the design capabilities of those systems and components are not challenged in a manner not previously assessed so as to create the possibility of a new or different kind of accident.

In addition, the environmental qualification of plant equipment is not adversely affected by this amendment, further assuring that components are not challenged in a manner not previously assessed. In summary, the proposed change does not create the possibility of a new or different kind of accident from any previously assessed.

<u>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</u>.

The proposed change will not cause existing Technical Specification operational limits or system performance criteria to be exceeded. Further, numerous conservatisms exist in the applicable analyses and system performance capabilities used to establish the revised design basis for the service water system. A number of components are designed to function at temperatures well above 82°F. Heat exchangers are assumed to have a maximum amount of fouling and corrosion. Heat gain is conservatively estimated in the post-accident containment reponse analyses.

Finally, based on historical information, the service water can be expected to approach the design limit of 82°F on an infrequent basis. With the exception of 1987, the average daily service water temperature has exceeded 76°F only twice since 1978. Therefore, the proposed change does not result in a significant reduction in a margin of safety.

ATTACHMENT C

NIAGARA MOHAWK POWER CORPORATION

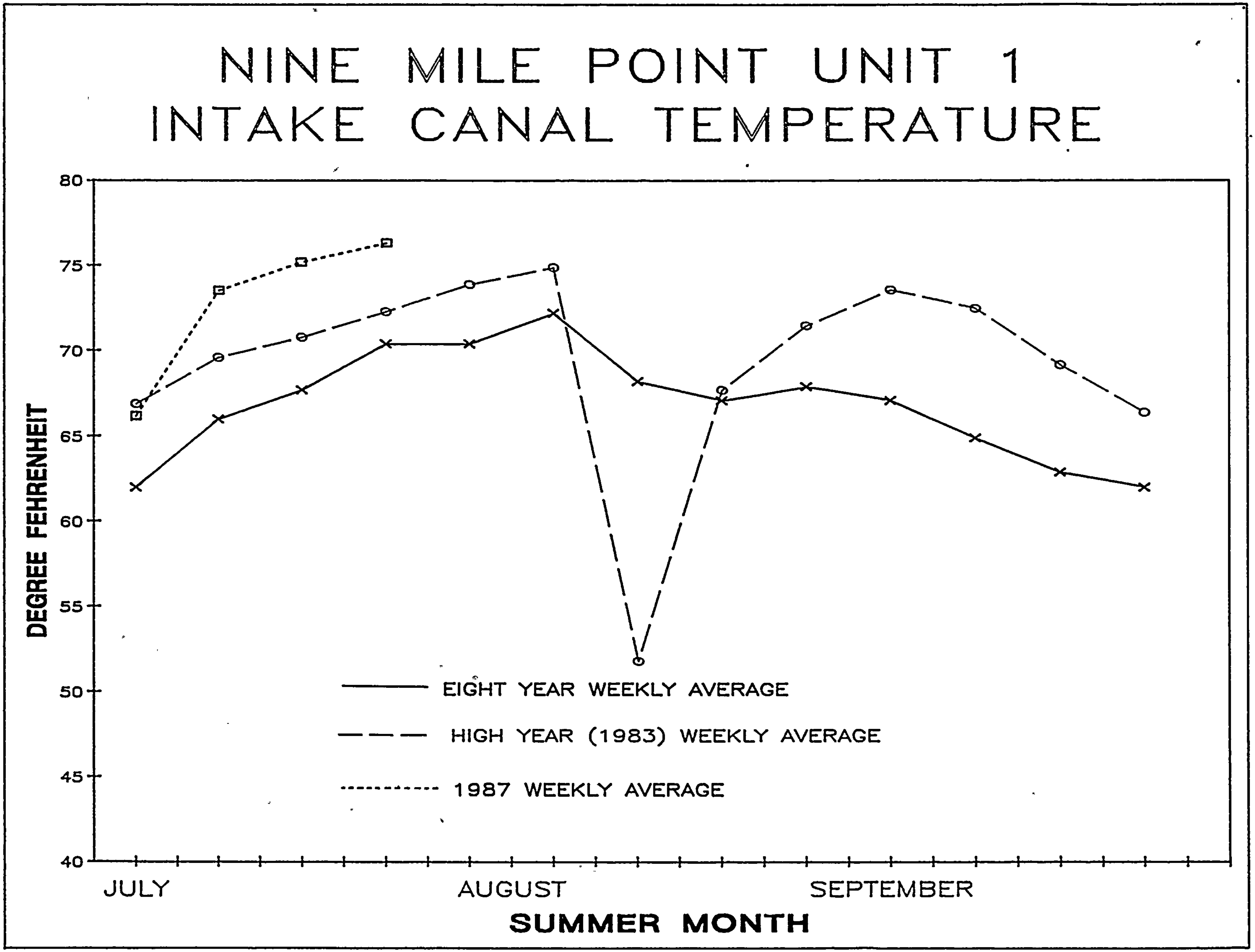
LICENSE NPF-69

DOCKET NO. 50-410

Explanation of Why Emergency Situation Occurred and Why it Could Not Be Avoided

When the Technical Specifications for Nine Mile Point Unit 2 were being developed, Niagara Mohawk proposed a temperature limit of 77°F for the service water supply header discharge water temperature. However, the NRC set this limit at 76°F when the low power Technical Specifications were issued for Nine Mile Point Unit 2. At that time, Niagara Mohawk reviewed this change and concluded that since the lake temperature had exceeded 76°F only occasionally in the past and only twice since 1978, both instances being in August of 1983, the 76°F Technical Specification operating limit would not impose significant operating restraint on the plant. However, as can be observed from the lake temperature profiles plotted on the following page, an unusual heat wave during the summer of 1987 has had dramatic effects on the temperature of Lake Ontario. Although the above data was taken from the intake canal of Nine Mile Point Unit 1, the relationship of 1987 lake temperatures to corresponding temperatures in earlier years is relevant to Nine Mile Point Unit 2. The temperature figures given are weekly average values. The baseline 8-year historic average represents data from 1978 through 1986, excluding 1982 when the plant was shut down for the summer and no readings were recorded. Against this historic baseline, it can be observed that the weekly average 1987 lake temperatures are running about 6°F warmer. When compared to the previous warm year, 1983, weekly averages for this year are about 4°F higher. It can also be observed from the 1983 data that the lake temperature is subject to fast changes, as much as 17°F in a day, based on wind and/or storm conditions. Once the water is heated, elevated temperatures can still be experienced until late September. Therefore, operation of Nine Mile Point Unit 2 could be impacted by elevated lake temperatures during this entire period.

The unusually long heat wave occurring in the area where the plant is located has increased the lake temperature to between 76°F - 78°F. The temperature first exceeded 76°F on July 13, 1987, and the temperature has peaked at temperatures greater than 77°F on a number of occasions. As a result, Niagara Mohawk initiated a review of the service water temperature design basis in an attempt to raise the maximum allowable temperature. The preliminary results of this review indicated a Technical Specification limit of 77°F was acceptable, and this change was incorporated as an emergency amendment to the Nine Mile Point Unit 2 operating license on July 22, 1987. Service water temperature exceeded 77°F on the evening of July 24, and the unit was forced to shutdown on the morning of July 25. Operation resumed on the morning of July 28.


NINE MILE POINT UNIT 1
INTAKE CANAL TEMPERATURE
80
75
70
65
60
55
50
45
40
DEGREE FEHRENHEIT
EIGHT YEAR WEEKLY AVERAGE
HIGH YEAR (1983) WEEKLY AVERAGE
1987 WEEKLY AVERAGE
JULY
AUGUST
SEPTEMBER
SUMMER MONTH

The amendment submitted on July 22, 1987, stated that when the analyses supporting operation with service water temperatures of up to 82°F were completed, Niagara Mohawk expected to amend the emergency request to incorporate the higher temperatures. Niagara Mohawk has devoted all available resources to the expeditious preparation and review of these analyses, and they have just been completed. Since the lake temperature is continuing to peak between 76°F and 78°F and is projected to continue at this or higher levels, Niagara Mohawk requests this change be considered an emergency technical specification change, so that Nine Mile Point Unit 2 can continue operation. Every day of delay in plant operation due to the lake temperature exceeding 77°F will add to the delay in the commercial operation of the plant. Since the analyses to support the operation of the service water system at 81°F was only completed on July 30, 1987, Niagara Mohawk has applied for the license amendment in a timely manner.

Niagara Mohawk therefore requests that its license amendment be considered an emergency situation as defined in 10 CFR 50.91 and that prior notice and opportunity for a hearing or for public comment be dispensed with.

ATTACHMENT D

NIAGARA MOHAWK POWER CORPORATION

LICENSE NPF-69

DOCKET NO. 50-410

Environmental Considerations

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. Therefore, although the change will involve an increase in the plant effluent discharge temperature, it will not affect the differential discharge temperature to the lake. In addition, the maximum discharge temperature of 110°F permitted by the SPDES permit will not be exceeded. Niagara Mohawk 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. 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 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement nor environmental assessment need be prepared in connection with the issuance of this amendment.