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

September 18, 1998

Mr. John H. Mueller
Chief Nuclear Officer
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Operations Building, Second Floor
P. O. Box 63
Lycoming, NY 13093

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION, UNIT NO. 1 (TAC NO. M99130)

Dear Mr. Mueller:

The Commission has issued the enclosed Amendment No. 163 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1 (NMP1). The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated July 16, 1998, as supplemented by letter dated September 3, 1998. The application by letter dated July 16, 1998, supersedes a July 2, 1997, submittal in its entirety.

This amendment changes TS 3/4 2.3 regarding reactor coolant chemistry in accordance with a report by Electrical Power Research Institute, Inc., TR-103515-R1, "BWR Water Chemistry Guidelines, 1996 Revision."

A copy of the related Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register Notice.

Sincerely,

Darl S. Hood

Darl S. Hood, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-220

Enclosures: 1. Amendment No. 163 to DRP-63
2. Safety Evaluation

cc w/encls: See next page

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Mr. John H. Mueller
Chief Nuclear Officer
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Operations Building, Second Floor
P. O. Box 63
Lycoming, NY 13093

September 8, 1998

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION, UNIT NO. 1 (TAC NO. M99130)

Dear Mr. Mueller:

The Commission has issued the enclosed Amendment No. 163 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1 (NMP1). The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated July 16, 1998, as supplemented by letter dated September 3, 1998. The application by letter dated July 16, 1998, supersedes a July 2, 1997, submittal in its entirety.

This amendment changes TS 3/4 2.3 regarding reactor coolant chemistry in accordance with a report by Electrical Power Research Institute, Inc., TR-103515-R1, "BWR Water Chemistry Guidelines, 1996 Revision."

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Sincerely,

ORIGINAL SIGNED BY:

Darl S. Hood, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-220

Enclosures: 1. Amendment No. 163 to DRP-63
2. Safety Evaluation

cc w/encls: See next page

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DATE	09/16/98		09/16/98		09/18/98		09/16/98		

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DATED: September 18, 1998

AMENDMENT NO. 163 TO FACILITY OPERATING LICENSE NO. DPR-63 NINE MILE POINT NUCLEAR POWER STATION UNIT NO. 1

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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 163
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated July 16, 1998, as supplemented by letter dated September 3, 1998, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (I) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-69 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 163 are hereby incorporated into this license. Niagara Mohawk Power Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

S. Singh Bajwa, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 18, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 163

TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Replace the following page of the Appendix A Technical Specifications with the attached page.

Remove	Insert
96	96
97	97
---	97a (new)
98	98

LIMITING CONDITION FOR OPERATION

3.2.3 COOLANT CHEMISTRY

Applicability:

Applies to the reactor coolant system chemical requirements.

Objective:

To assure the chemical purity of the reactor coolant water.

Specification:

a. The reactor coolant water shall not exceed the following limits for > 24 hours with the coolant temperature ≥ 200 degrees F and reactor thermal power ≤ 10%, or a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature be reduced to < 200 degrees F within 10 hours.

Conductivity	1 μmho/cm
Chloride ion	100 ppb
Sulfate ion	100 ppb

SURVEILLANCE REQUIREMENT

4.2.3 COOLANT CHEMISTRY

Applicability:

Applies to the periodic testing requirements of the reactor coolant chemistry.

Objective:

To determine the chemical purity of the reactor coolant water.

Specification:

Samples shall be taken and analyzed for conductivity, chloride and sulfate ion content daily. In addition, if the conductivity becomes abnormal (other than short term spikes) as indicated by the continuous conductivity monitor, samples shall be taken and analyzed within 8 hours.

When the continuous conductivity monitor is inoperable, a reactor coolant sample shall be taken and analyzed for conductivity, chloride and sulfate ion content at least once per 8 hours.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT

b. The reactor coolant water shall not exceed the following limits for >24 hours with reactor thermal power >10%, or a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature be reduced to <200 degrees F within 10 hours.

Conductivity	1 μmho/cm
Chloride ion	20 ppb
Sulfate ion	20 ppb

c. In no case shall the reactor coolant exceed the following limits at the specified conditions or, a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature be reduced to <200 degrees F within 10 hours.

1. With reactor coolant temperature ≥ 200 degrees F, the conductivity has a maximum limit of 5μmho/cm, or

2. With reactor coolant temperature ≥ 200 degrees F and reactor thermal power ≤ 10%, the maximum limit of chloride or sulfate ion concentration is 200 ppb, or

3. With reactor thermal power >10%, the maximum limit of chloride or sulfate ion concentration is 100 ppb.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
d. If the continuous conductivity monitor is inoperable for more than seven days, a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature be reduced to < 200 degrees F within 24 hours.	

In its May 8, 1997 letter, the NRC required that NMPC submit an application for amendment to address the differences between the current TS conductivity limits for reactor coolant chemistry and the analysis assumptions for the core shroud crack growth evaluations. The purpose of this specification is to limit intergranular stress corrosion cracking (IGSCC) crack growth rates through the control of reactor coolant chemistry. The LCO values ensure that transient conditions are acted on to restore reactor coolant chemistry values to normal in a reasonable time frame. Under transient conditions, potential crack growth rates could exceed analytical assumptions, however, the duration will be limited so that any effect on potential crack growth is minimized and the design basis assumptions are maintained. The plant is normally operated such that the average coolant chemistry for the operating cycle is maintained at the conservative values of < 0.19 μmho/cm for conductivity and < 5 ppb for chloride ions and < 5 ppb for sulfate ions. This will ensure that the crack growth rate is bounded by the core shroud analysis assumptions. Since these are average values, there are no specific LCO actions to be taken if these values are exceeded at a specific point in time. The EPRI "BWR Water Chemistry Guidelines-1996 Revision" (EPRI TR-103515-R1, BWRVIP-29) action level 1 guidelines suggest that if conductivity is above 0.3 μS/cm, or chloride or sulfate ions exceed 5 ppb, that corrective action be initiated as soon as possible and to restore levels below level 1 within 96 hours. If the parameters are not reduced to below these levels within 96 hours, complete a review and implement a program and schedule for implementing corrective measures.

Specifications 3.2.3a, b, and c are consistent with NMPC's commitment to Table 4.4 of the BWR water chemistry guidelines. The 24 hour action time period for exceeding the coolant chemistry limits described in 3.2.3a and b ensures that prompt action is taken to restore coolant chemistry to normal operating levels. The requirement to commence a shutdown within 1 hour, and to be shutdown and reactor coolant temperature be reduced to < 200 degrees F within 10 hours minimizes the potential for IGSCC crack growth. Reactor water samples are analyzed daily to ensure that reactor water quality remains within the BWR water chemistry guidelines. These samples are analyzed and compared to action level 1 values.

The conductivity of the reactor coolant is continuously monitored. The continuous conductivity monitor is visually checked shiftly in accordance with procedures. The monitor alarms at the local panel. The recorder, which is located in the Control Room, alarms in the Control Room. The samples of the coolant which are analyzed for conductivity daily will serve as a comparison with the continuous conductivity monitor. The primary sample point for the reactor water conductivity samples is the non-regenerative heat exchanger in the reactor water cleanup system. An alternate sample point is the #11 recirculation loop. The reactor coolant samples will also be used to determine the chloride and sulfate concentrations. Therefore, the sampling frequency is considered adequate to detect long-term changes in the chloride and sulfate ion content. However, if the conductivity becomes abnormal (> 0.19 μmho/cm), other than short term spike chloride and sulfate measurements will be made within 8 hours to assure that the normal limits (< 5 ppb of chloride or sulfate ions) are maintained. A short term spike is defined as a rise in conductivity (> 0.19 μmho/cm) such as that which could arise from injection of additional feedwater flow for a duration of approximately 30 minutes in time. These actions will minimize the potential for IGSCC crack growth.

UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 163 TO FACILITY OPERATING LICENSE NO. DPR-63

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-220

1.0 INTRODUCTION

By letter dated July 16, 1998, as supplemented by letter dated September 3, 1998, Niagara Mohawk Power Corporation (NMPC and the licensee), proposed a license amendment to change the Technical Specifications (TSs) for Nine Mile Point Nuclear Station, Unit No. 1 (NMP1). The proposed amendment would change TS 3/4.2.3 regarding reactor coolant chemistry in accordance with a report by Electrical Power Research Institute, Inc. (EPRI) TR-103515-R1, "BWR Water Chemistry Guidelines, 1996 Revision," also known as Boiling Water Reactor Vessel and Internals Project (BWRVIP)-29. Specifically, the amendment would define new conductivity limits in TS 3.2.3a (when reactor coolant is 200 °F or more and reactor thermal power is no more that 10%), and in TS 3.2.3b (when reactor thermal power exceeds 10%). The new conductivity limits would be 1 μ mho/cm, which is less than the existing limits of 2 μ mho/cm and 5 μ mho/cm. The chloride ion limit in TS 3.2.3a, 0.1 ppm, would remain at this value but would be designated as 100 ppb. The chloride ion limit in TS 3.2.3b would be changed from 0.2 ppm to 20 ppb. Sulfate ion limits would be added to TS 3.2.3a and TS 3.2.3b at 100 ppb and 20 ppb, respectively. The proposed change to TS 3.2.3a would require that the reactor coolant water shall not exceed these new limits specified in TS 3.2.3a for conductivity, chloride ion, or sulfate ion for more than 24 hours when the coolant temperature is equal to or greater than 200 °F and the reactor thermal power is no more than 10 percent, or a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature reduced to below 200 °F within 10 hours. Similarly, TS 3.2.3b would require that the reactor coolant water not exceed the new limits specified in TS 3.2.3b for more than 24 hours when reactor thermal power exceeds 10 percent, or a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature reduced to less than 200 °F within 10 hours. TS 3.2.3c would be changed to state: "In no case shall the reactor coolant exceed the following limits at the specified conditions or a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature be reduced to less than 200 °F within 10 hours: (1) With reactor coolant temperature at or above 200 °F, the conductivity has a maximum limit of 5 μ mho/cm, or (2) With reactor coolant temperature at or above 200 °F and reactor thermal power no more than 10 percent, the maximum limit of chloride or sulfate ion concentration is 200 ppb, or (3) With reactor thermal power greater than 10 percent, the maximum limit of chloride or sulfate ion concentration is 100 ppb." Existing TS 3.2.3d would be revised to address circumstances previously addressed by TS 3.2.3e, but modified to require that "If the continuous conductivity monitor is inoperable for more than 7 days, a shutdown shall be initiated within 1 hour and the reactor shall be shutdown and reactor coolant temperature be reduced to below 200 °F within 24 hours." TS 4.2.3 would be revised to add that the samples taken and analyzed for conductivity and chloride ion content

are also to be analyzed for sulfate ion content. The sampling frequency specified in TS 4.2.3 would be increased from "at least 3 times per week with a maximum time of 96 hours between samples" to "daily." TS Bases 3/4.2.3 would also be changed to reflect that the purpose of TS 3/4.2.3 is to limit intergranular stress corrosion cracking (IGSCC) crack growth rates to values consistent with Nine Mile Point Unit 1 (NMP1) core shroud analyses in accordance with an NRC letter dated May 8, 1997, and to describe the NMP1 operating philosophy of maintaining levels (averaged over an operating cycle) for conductivity, chloride and sulfate concentration to values that ensure the crack growth rate is bounded by the core shroud analysis.

By letter dated September 3, 1998, NMPC deleted its request regarding two changes that had been proposed as new TSs in the July 16, 1998, application for license amendment. NMPC also submitted edited versions of TS 3.2.3a and 3.2.3b to improve clarity. These changes do not affect the Commission's finding of no significant hazards consideration that was issued in a Federal Register notice (63 FR 43432, August 13, 1998).

2.0 BACKGROUND

During the 1997 refueling outage at NMP1, NMPC found extensive cracking in the core shroud vertical welds. By letter dated April 8, 1997, NMPC submitted flaw evaluations and analyses to demonstrate the acceptability of the as-found vertical weld cracking for at least 10,600 hours of hot (above 200 °F) operation. NMPC's flaw evaluation was based upon a bounding crack growth rate of 5×10^{-5} inch per hour. The use of the bounding crack growth rate was supported by laboratory test data performed on sensitized stainless steel at a range of conductivities from 0.3 to 1.5 μmho/cm. In a letter dated April 30, 1997, NMPC committed to continue operating NMP1 in accordance with the EPRI Water Chemistry Guidelines, including the most limiting condition of "Action Level 1" specified therein. According to Action Level 1, if the conductivity should exceed the limit of 0.3 μmho/cm, appropriate corrective action should be taken to reduce the conductivity to be no more than that value within 96 hours. Although NMP1 has been operating at a conductivity of less than 0.3 μmho/cm during the last seven cycles, the conductivity limit in its TS 3.2.3 is 5 μmho/cm (when steaming rate $\geq$ 100,000 pounds per hour). By letter dated May 7, 1997, NMPC committed to submit an application for license amendment that would address the difference between the current reactor coolant system chemistry requirements of NMP1 TS 3.2.3 and the coolant chemistry criteria referenced for core shroud crack growth rates as described in NMPC's letter of April 8, 1997. By letter dated May 8, 1997, the NRC staff addressed continued operation of NMP1 with the existing core shroud for an additional 10,600 hours of hot operation. The NRC staff found this continued operating period acceptable subject to the conditions that (1) reactor coolant chemistry be maintained within the EPRI guidelines and (2) NMPC submit the license amendment application. Thus, NMPC's application for license amendment is in response to the conditions specified in the NRC staff's letter of May 8, 1997.

3.0 EVALUATION

The proposed TS amendment consists of changes to TS sections 3.2.3 and 4.2.4 and the associated TS Bases regarding the control of reactor coolant chemistry. These proposed changes are summarized and discussed below.

(1) TS 3.2.3, "Coolant Chemistry,"

(I) In TS 3.2.3a, the proposed changes are:

(a) The reactor operating conditions for which the water chemistry limits (conductivity, chloride ion, and sulfate ion concentrations) specified in this section will apply are changed from steaming rates less than 100,000 pounds per hour to the conditions when the coolant temperature is ≥ 200 °F and the reactor thermal power is ≤ 10%.
(b) The conductivity limit is changed from 2 μmho/cm to 1 μmho/cm.
(c) A sulfate ion limit of 100 ppb is added.
(d) The chloride ion limit remains the same but is designated as 100 ppb instead of 0.1 ppm.
(e) If the water chemistry limits specified in this TS are exceeded for >24 hours, a shutdown of the reactor shall be initiated within 1 hour and the reactor coolant temperature shall be reduced to <200 °F within 10 hours.

(ii) In TS 3.2.3b, the proposed changes are:

(a) The reactor operating conditions for which the water chemistry limits specified in this TS will apply are changed from steaming rates greater than or equal to 100,000 pounds per hour to the conditions when the coolant temperature is ≥ 200 °F and the reactor thermal power is > 10%.
(b) The conductivity limit is changed from 5 μmho/cm to 1 μmho/cm.
(c) A sulfate ion limit of 20 ppb is added.
(d) The chloride ion limit is changed from 0.2 ppm to 20 ppb.
(e) If the water chemistry limits specified in this TS are exceeded for >24 hours, a shutdown of the reactor shall be initiated within 1 hour and the reactor coolant temperature shall be reduced to <200 °F within 10 hours.

(iii) In TS 3.2.3c. the proposed changes are:

(a) The maximum conductivity limit is changed from 10 μmho/cm to 5 μmho/cm.
(b) The maximum limit of chloride ion concentration is changed from 0.5 ppm to 100 ppb and 200 ppb for reactor coolant temperature ≥ 200 °F and reactor thermal power > 10% or ≤ 10%, respectively.
(c) The maximum limits of sulfate ion concentration of 100 ppb and 200 ppb are added for reactor coolant temperature ≥ 200 °F and reactor thermal power ≥ 10% or ≤10%, respectively.
(d) If the water chemistry limits specified in this TS are exceeded at any time, a shut down of the reactor shall be initiated within one hour and the reactor coolant temperature shall be reduced to <200 °F within 10 hours.

(iv) In TS 3.2.3d, the proposed change is:

(a) This TS is deleted because the reactor shutdown conditions are specified in TSs 3.2.3(a), (b) and (c).

(v) In TS 3.2.3e, the proposed changes are:

(a) This TS is renumbered as 3.2.3d.

(b) When the continuous conductivity monitor is inoperable for more than seven days, the requirement to place the reactor in cold shutdown condition within 24 hours as currently specified is changed to initiating a reactor shutdown within one hour and the reactor coolant temperature is required to be reduced to < 200 °F within 24 hours.

The NRC staff notes that the bounding crack growth rate of 5×10^{-5} inch per hour used in calculating the crack growth in the core shroud vertical welds is supported by laboratory test data performed on sensitized stainless steel at conductivities ranging from 0.3 to 1.5 μmho/cm. Therefore, the proposed conductivity limit of 1 μmho/cm for normal operation in the TS is consistent with the analysis assumptions for the core shroud crack growth evaluations. The NRC staff also notes that the requirement to reduce the reactor coolant temperature to < 200 °F within a specified period of time (within 10 hours in TSs 3.2.3a, b and c or 24 hours in TS 3.2.3d) during reactor shutdown is added. This additional requirement is desirable in limiting the potential crack growth due to IGSCC, since IGSCC is known to become inactive at a temperature below 200 °F. Overall, the proposed reactor water chemistry limits are much more conservative than those currently specified and, thus, will limit the potential crack growth in the core shroud due to IGSCC. The NRC staff has determined that the proposed changes in TS 3.2.3 are acceptable because the specified water chemistry limits are consistent with EPRI's BWR Water Chemistry Guidelines, 1996 Revision, and as discussed in the NRC staff's letter of May 8, 1997, are consistent with the analyses accepted by the NRC for continued operation of NMP1 for at least 10,600 hours of the current fuel cycle.

(2) TS 4.2.3, "Coolant Chemistry."

In TS 4.2.3 the proposed changes are:

(i) In addition to the conductivity and chloride ion content, the sulfate ion content is also required to be analyzed in the coolant samples.

(ii) The frequency of analyzing the samples is increased from three times every week to once every 24 hours.

The NRC staff has determined that the proposed changes to the surveillance requirements in TS 4.2.3 are acceptable, since the scope of the coolant sample analyses is increased to include sulfate ion concentration and the monitoring frequency is also increased to provide assurance that the limiting condition for operation as specified in the TS will be adequately monitored.

(3) TS Bases 3.2.3 and 4.2.3

NMPC has revised the TS Bases for TSs 3.2.3 and 4.2.3 to provide more detail regarding the control of the coolant water chemistry. The revised discussion also identifies the administrative controls that apply to coolant water chemistry. Significant items discussed in the proposed TS Bases include the following:

(i) The purpose of the TS is to limit the potential crack growth in the core shroud through tight control of the reactor coolant chemistry so that the analysis assumptions in the core shroud crack growth evaluations are met.

(ii) NMPC discusses its commitment to operate NMP1 in accordance with EPRI's BWR water chemistry guidelines, including its administrative control of the water chemistry to meet the Action Level 1 limits (conductivity of 0.3 μmho/cm and chloride or sulfate ions of 5 ppb).

(iii) NMPC's goal in controlling coolant conductivity is to not exceed 0.19 μmho/cm. Additional coolant sample analysis will be performed within eight hours if conductivity exceeds 0.19 μmho/cm for longer than 30 minutes.

(vi) The locations of the coolant samples taken for analysis are identified.

The NRC staff notes that EPRI's water chemistry guidelines do not require a plant shutdown if the water chemistry limit corresponding to Action Level 1 is exceeded. Rather, it requires that water chemistry be reduced below the Action Level 1 limit within 96 hours. Furthermore, if the Action Level 1 limits cannot be restored within 96 hours, a long-range program to improve the water chemistry is required to be initiated. Since the water chemistry Action Level 1 limits do not require a reactor shutdown when the limits are exceeded, the NRC staff agrees that it is appropriate to control these limits administratively, instead of by the TS. The NRC staff also notes that, even if the Action Level 1 limit for conductivity (0.3 μmho/cm) is exceeded, it will not impact the validity of the analysis assumptions for the core shroud crack growth evaluations, because the bounding crack growth rate (5×10^{-5} inch/hour) used in the crack growth calculation is supported by the test data performed in an environment with conductivity ranging from 0.3 to 1.5 μmho/cm. The reactor shutdown requirements in TS 3.2.3 would become applicable if conductivity were to exceed 1 μmho/cm for over 24 hours.

The NRC staff has reviewed NMPC's proposed TS changes and concludes that (1) the proposed reactor water chemistry limits and monitoring frequency meet the guidance in EPRI's BWR water chemistry guidelines and (2) the specified conductivity limits are consistent with assumptions used in the analysis previously reviewed and accepted by the NRC staff regarding the NMP1 core shroud crack growth evaluations. Furthermore, NMPC's administrative control of reactor coolant chemistry will provide additional assurance in limiting the potential crack growth in the core shroud.

4.0 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.

5.0 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 previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (63 FR 43432). 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.

6.0 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 Contributors: W. Koo
D. Hood

Date: September 18, 1998