

NIAGARA MOHAWK POWER CORPORATION/NINS MILE POINT, P.O. BOX 63, LYCOMING, NY 13093/TELEPHONE (315) 349-2882

B. Ralph Sylvia **Executive Vice President** Nuclear

December 2, 1994 NMP2L 1513

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

> RE: Nine Mile Point Unit 2 Docket No. 50-410 NPF-69

Gentlemen:

SUBJECT: PROPOSED LICENSE AMENDMENT - UPRATED OPERATION

On July 22, 1993 (NMP2L 1397), Niagara Mohawk submitted an Application for Amendment to the Nine Mile Point Unit 2 Operating License NPF-69. Attached to the application were six enclosures. These enclosures are listed in Attachment A to this letter. As stated in our July 22, 1993 submittal, various engineering documents were still being revised to reflect the effects of the proposed power uprate. In addition, since submitting the July 22, 1993 letter and its enclosures to the Staff, various calculations and analyses performed by General Electric in support of the proposed power uprate amendment have been reviewed by Niagara Mohawk. As a result, several changes are required to Enclosures 1, 2, and 3 of Niagara Mohawk's July 22, 1993 letter. Therefore, Niagara Mohawk Power Corporation hereby transmits revised pages to the enclosures contained in the aforementioned Application for Amendment to the Nine Mile Point Unit 2 Operating License NPF-69.

Single page changes to Enclosure 1, 2 and 3 of our July 22, 1993 submittal are provided as Attachment B, C and D respectively. No changes are proposed for Enclosures 4, 5 and 6. These changes to our July 22, 1993 submittal do not affect Niagara Mohawk's conclusion that this power uprate does not involve a significant hazards consideration. These changes also do not authorize any changes in the types of effluents described in our previous submittal. The changes have been reviewed in accordance with Section 6.5 of the Technical Specifications.

Pursuant to 10CFR50.91(b)(1), Niagara Mohawk is providing a copy of this revision to the license amendment request and the supporting information to the appropriate state representative.

ATTACHMENT D TO THIS LETTER CONTAINS PROPRIETARY INFORMATION PURSUANT TO 10CFR2.790. Therefore, in accordance with 10CFR2.790, on behalf of General Electric, Niagara Mohawk requests that the proposed changes contained in Attachment D of this letter be withheld from public disclosure in accordance with Enclosure change: Nec role 41. End. APDI' 4 of our July 22, 1993 submittal.

9412120138 941202 PDR ADOCK 05000410 PDR

Page 2

Niagara Mohawk apologizes for any inconvenience that this may have caused. No further changes to the July 22, 1993 power uprate package are anticipated. Issuance of the proposed amendment is requested by March 1, 1995 to support startup from the upcoming fourth refueling outage.

Sincerely,

BRalph Sylo

B. Ralph Sylvia Executive Vice President - Nuclear

BRS/KWK/Imc Attachments

XC:

Regional Administrator, Region I Mr. B. S. Norris, Senior Resident Inspector Mr. L. B. Marsh, Director, Project Directorate I-1, NRR Mr. D. S. Brinkman, Senior Project Manager, NRR Ms. Donna Ross Division of Policy Analysis and Planning New York State Energy Office Agency Building 2 Empire State Plaza Albany, NY 12223 Records Management

ATTACHMENT A

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

Enclosures to July 22, 1993 Letter to NRC

- Description and Evaluation of Proposed Changes to the Operating License and Technical Specifications
- 2. Proposed changes to Operating License, Technical Specifications and Bases.
- General Electric Topical Report, NEDC-31994P, "Power Uprate Licensing Evaluation for Nine Mile Point Nuclear Station Unit 2," Revision 1. (proprietary)
- 4. GE Affidavit, Revision 1, on NEDC-31994P, Revision 1.
- General Electric Report, NEDC-31830P, "Nine Mile Point Nuclear Station Unit 2 SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis, Revision 1, November 1990. (proprietary)
- 6. GE Affidavit, Revision 1, on NEDC-31830P, Revision 1.

ATTACHMENT B

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

Proposed Changes to Enclosure 1

Replace the existing pages with the pages listed below. Each page has been provided with marginal markings indicating changes to the text.

Description of Change

- Page Description of Change
- 5 The SLCS relief valve setpoint has been revised to show the influence of the back pressure.
- 6 New calculations of the main steam line high flow setpoints have resulted in minor revisions to the normal and allowable equivalent flow rates.
- 12 Revised to show that the HPCS system is designed to supply the 517 gpm flow rate at 1200 (instead of 1175) psid.

Enclosure 1

for NMP2 after power uprate is 4.538 MWt per bundle. This value is acceptable for application of the generic SLMCPR statistical analysis to uprated NMP2. The generic analysis is documented through NEDC 24011-P-A (GESTAR II) and NEDC-31152P (GE Fuel Bundle Design).

5. <u>TS 4.1.5.C and TS 4.1.5.D.2</u> - Standby Liquid Control System surveillance test pressure requirements in Technical Specifications 4.1.5.c is increased by 15 psi to 1235 psig and the pump relief valve setpoint Technical Specification in 4.1.5.D.2 is increased by 7 psi to less than or equal to 1394 psig.

11

Evaluation

The Standby Liquid Control System surveillance test pressure is increased by 15 psi to demonstrate that it is capable of providing the design flow rate for uprated operation. These conditions include operating at a nominal dome pressure 15 psi higher than currently specified. The main steam safety relief valve and pressure scram setpoints (analytical limits) are increased by about 15 psi which is consistent with the dome pressure increase. Therefore, to adequately demonstrate the ability of the system to inject sodium penetaborate solution into the reactor for uprated operating conditions, a test pressure increase of 15 psi is appropriate. The 1235 psig test pressure is well below the 1400 psig design capability of the system to perform its function at uprated conditions. The upper limit of the pump relief valve setpoint is increased to 1394 psig. This value accounts for the valve back pressure while providing operating margin and still protecting the system within the design pressure (1400 psig). This change ensures that, if needed, SLCS will providy adequate flow to the vessel.

6. <u>TS Table 3.3.1-1 and Table 3.3.4.2-1</u> - The turbine first stage pressure scram and RPT bypass at 30% power in Technical Specification Tables 3.3.1-1 note (i) and action 6, and Table 3.3.4.2-1 footnote (**), are revised to indicate that the uprated trip setpoints and allowable values equivalent to 30% rated thermal power are 125.8 psig (trip setpoint) 136.4 psig (allowable value).

7.

8.

Evaluation

This setpoint was selected to allow operating margin to avoid scrams during low power turbine generator trips. Transient events associated with operating just below the setpoint have been shown to be non-limiting. As discussed in LTR1, Section F.4.2(c), and in Section 5.1.2.8 of Enclosure 3, this small pressure setpoint increase maintains the safety basis for the setpoint and does not introduce any significant difference in the transient analysis results.

TS Table 3.3.2-2 - The main steam line flow differential pressure setpoints, as shown in Technical Specification Table 3.3.2-2, item 1.c.3, are revised to substitute "trip and allowable" values of 121.5 psid and 122.8 psid, respectively.

Evaluation

The main steam line flow differential pressure setpoint changes reflect the redefinition of rated main steam line flow that occurs with power uprate. The nominal trip setpoint and allowable value are set at 137.8% and 138.4%, respectively, of rated steam flow. The differential pressure setpoints change due to the higher operating pressure and the increased uprated steam flow. The analytical limit of 140% of uprated steam flow is maintained for the uprate analyses. That limit was retained to ensure that the desired trip avoidance margin can be maintained for the normal plant testing of MSIVs and turbine stop valves. The increase in the value of the trip setpoint still provides a high assurance of isolation protection for a main steam line break accident which meets its original design intent. This approach is consistent with section F.4.2(e) of LTR1.

TS Table 3.3.2-2 - The main steam line tunnel temperature trip setpoints as shown in Technical Specification Table 3.3.2-2 item 1.d are revised to values of ≤ 167.2 °F for high temperature, ≤ 70.0 °F for high temperature differential, and ≤ 148.2 °F for high main steam line lead enclosure temperature. The corresponding allovable values are changed to ≤ 170.6 °F for high temperature, ≤ 71.7 °F for high temperature differential, and ≤ 151.6 °F for high main steam line lead enclosure temperature.

17. TS B3/4.5.1 and B3/4.5.2 - The value for HPCS pump design capacity is changed to 517 gpm and the corresponding differential pressure is changed to 1200 psid on page B3/4 5-2 of Technical Specification Bases B3/4.5.1 and B3/4.5.2.

Evaluation

The bases for differential pressure value of 1200 psid are events leading to an isolated vessel without feedwater supply (e.g., steam line break LOCA outside containment) where HPCS is the system supplying inventory to the isolated vessel. The design value of 1200 psid ensures that the system will supply the flow assumed in the analysis of these events. Acceptable results were found including the SRV spring setpoint values for the uprated condition (with +3% setpoint drift) even with the two lowest set SRVs out of service.

HPCS pump flow of 517 gpm corresponding to the high differential pressure point is changed from 516 gpm to be consistent with SAFER/GESTR analysis. The current as built HPCS system characteristics amply satisfy this requirement.

18. <u>TS B3/4.6.1.2, B3/4.6.1.5 and B3/4.6.2</u> - The bases for Technical Specifications B3/4.6.1.2 and B3/4.6.1.5 are revised to clarify that uprated analysis results in maximum calculated containment pressure less than 39.75 psig. Technical Specification B3/4.6.2 is revised to clarify that the containment pressure during the design basis accident is less than 40 psig. The current containment pressure of 39.75 psig is used in the performance of containment leak rate testing.

Evaluation

The bases for the value currently in the TS for the maximum containment pressure are reworded to clarify that the maximum containment pressure after power uprate will be maintained below the current value used for containment leak rate testing. Section 4.1 documents the containment analysis for power uprate and shows a peak DBA-LOCA calculated pressure of 36.8 psig (less than the current testing requirement of 39.75 psig). The LOCA analysis was performed with GE methodology which has been reviewed and accepted by the NPC as part of the NRC's acceptance of the power uprate generic guidelines (LTR1). There is no impact on currently proved requirements and test procedures.