

John H. Mueller Senior Vice President and Chief Nuclear Officer Phone: 315.349.7907 Fax: 315.349.1321 e-mail: muellerj@nimo.com

December 28, 1999 NMP2L 1921

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,

Niagara Mohawk Power Corporation (NMPC) hereby transmits an Application for Amendment to Nine Mile Point Unit 2 (NMP2) Operating License NPF-69. Enclosed as Attachment A is the proposed change to the Technical Specifications (TS) as set forth in Appendix A to the above mentioned license. Supporting information and an analysis, demonstrating that the proposed change involves no significant hazards consideration pursuant to 10 CFR 50.92, are included as Attachment B. The Basis for concluding that this application meets the criteria of 10 CFR 51.22 for categorical exclusion from performing an environmental assessment is included as Attachment C. A hand marked-up copy of the affected TS pages is provided as Attachment D to assist in your review.

The proposed change herein revises TS Table 4.4.6.1.3-1, titled "Reactor Vessel Material Surveillance Program - Withdrawal Schedule." The current surveillance schedule requires the withdrawal of capsule number 1 at 10 Effective Full Power Years (EFPY). The revised surveillance schedule requires the withdrawal of capsule number 1 at 8 EFPY. In accordance with the provisions of TS 4.0.2, the revised surveillance schedule will allow the withdrawal of capsule number 1 between 8 EFPY and 10 EFPY, thereby allowing its removal during the upcoming refueling outage (RFO7), estimated at 8.7 EFPY.

NMPC requests that the NRC approve these proposed changes prior to approval of the Improved Technical Specifications conversion, to facilitate the removal of capsule number 1 during RF07.

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Pursuant to 10 CFR 50.91 (b) (1), NMPC has provided a copy of this amendment request and the associated analysis regarding no significant hazards determination to the appropriate state representative.

Very truly yours,

John H. Mueller

Senior Vice President and Chief Nuclear Officer

#### **Attachments**

xc:

Mr. H. J. Miller, NRC Regional Administrator, Region I

Ms. M. K. Gamberoni, Acting Section Chief PD-I, Section 1, NRR

Mr. G. K. Hunegs, NRC Senior Resident Inspector

Mr. P. S. Tam, Senior Project Manager, NRR

Mr. John P. Spath

**NYSERDA** 

286 Washington Avenue Ext.

Albany, NY 12203-6399

**Records Management** 

#### UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
·	)	
NIAGARA MOHAWK POWER CORPORATION	)	Docket No. 50-410
	)	
Nine Mile Point Nuclear Station Unit 2	)	

#### APPLICATION FOR AMENDMENT TO OPERATING LICENSE

Pursuant to Section 50.90 of the Regulations of the Nuclear Regulatory Commission, Niagara Mohawk Power Corporation, holder of the Facility Operating License No. NPF-69, hereby requests that Table 4.4.6.1.3-1, titled "Reactor Vessel Material Surveillance Program – Withdrawal Schedule," of the Technical Specifications (TS) as set forth in Appendix A to that License be amended. The proposed change has been reviewed in accordance with Section 6.5, titled "Review and Audit," of the TS.

The proposed change herein revises TS Table 4.4.6.1.3-1, titled "Reactor Vessel Material Surveillance Program - Withdrawal Schedule." The current surveillance schedule requires the withdrawal of capsule number 1 at 10 Effective Full Power Years (EFPY). The revised surveillance schedule requires the withdrawal of capsule number 1 at 8 EFPY. In accordance with the provisions of TS 4.0.2, the revised surveillance schedule will allow the withdrawal of capsule number 1 between 8 EFPY and 10 EFPY, thereby allowing its removal during the upcoming refueling outage (RFO7), estimated at 8.7 EFPY.

The proposed change will not authorize any change in the types of effluents or in the authorized power level of the facility in conjunction with this Application for License Amendment. Supporting information and analysis which demonstrate that the proposed changes do not involve a significant hazards consideration, pursuant to 10 CFR 50.92, are included as Attachment B.

Wherefore, the Applicant respectfully requests that Appendix A to Facility Operating License No. NPF-69 be amended in the form attached hereto as Attachment A.

NIAGARA MOHAWK POWER CORPORATION

By

John H. Mueller ' 'Senior Vice President and

Senior Vice President and Chief Nuclear Officer

Subscribed and sworn to before me
On this <u>a8th</u> day of <u>December</u>, 1999.

NOTARY PUBLIC

LISA M. CLARK

Notary Public in the State of New York

Oswego County Reg. No. 01CL6029220

My Commission Expires \( \) \( \) \( \) \( \) \( \) \( \)

#### **ATTACHMENT A**

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

# **Proposed Change to Technical Specifications**

Replace existing page 3/4 4-31 with attached revised page 3/4 4-31. This page has been retyped in its entirety with marginal markings to indicate the changes.

**TABLE 4.4.6.1.3-1** 

# REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM - WITHDRAWAL SCHEDULE

CAPSULE NUMBER	VESSEL LOCATION	LEAD FACTOR @ 1/4 T	WITHDRAWAL TIME (EFPY)	
1	3°	0.46	8	
2	177°	0.46	20	
3	183°	0.46	Spare	

#### **ATTACHMENT B**

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

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

#### **INTRODUCTION**

Nine Mile Point Unit 2 (NMP2) lacks plant dosimetry data. Therefore, withdrawal of the first reactor vessel material surveillance capsule during the upcoming refueling outage (RFO7) is necessary to validate the results of the NMP2 Neutron Transport calculations. The transport calculation is being performed to obtain flux/fluence at the core shroud locations.

This Amendment application revises Technical Specification (TS) Table 4.4.6.1.3-1, titled "Reactor Vessel Material Surveillance Program - Withdrawal Schedule," to allow the withdrawal of capsule number 1 during RFO7. The current reactor vessel material surveillance program schedules the withdrawal of capsule number 1 at 10 Effective Full Power Years (EFPY). The revised surveillance schedule would require withdrawal of the capsule number 1 at 8 EFPY.

The current required withdrawal time of capsule number 1 falls between scheduled refueling outages RFO7, estimated at 8.7 EFPY, and RFO8, estimated at 10.5 EFPY. TS 4.0.2 requires each surveillance requirement to be performed within the specified time interval, with a maximum allowable extension not to exceed 25% of the surveillance interval. Therefore, a scheduled withdrawal time of 8 EFPY for the capsule number 1 would provide for its removal between 8 EFPY and 10 EFPY.

#### **EVALUATION**

10 CFR 50, Appendix H, requires a material surveillance program that monitors changes in the fracture toughness properties of ferritic materials in the reactor vessel beltline region resulting from exposure of these materials to neutron irradiation and the thermal environment. Under the program, fracture toughness test data are obtained from material specimens exposed in surveillance capsules, which are withdrawn periodically from the reactor vessel.

10 CFR 50, Appendix H, Section III.C, provides requirements for an integrated surveillance program for a set of reactors that have similar design and operating features. In letters dated May 16 (from T. E. Lempges to W. Butler), September 30 (from C. V. Mangan to H. Denton), and November 18, 1985 (from C. V. Mangan to H. Denton), NMP2 provided information to demonstrate that its surveillance program satisfies the criteria in Section II.C (currently Section III.C) of Appendix H to 10 CFR 50 (integrated surveillance program.)

Removal of the surveillance capsule during RFO7, for testing at an estimated 8.7 EFPY, satisfies the requirement of the NMP2 surveillance program.

#### CONCLUSION

NMP2 complies with the criteria in Section III.C of Appendix H to 10 CFR 50 (integrated surveillance program). Compliance with the criteria in Section III.C of Appendix H to 10 CFR 50, ensures that the effect of neutron irradiation on the NMP2 reactor vessel beltline materials will be monitored throughout the life of the plant.

The surveillance capsule to be removed during RFO7 will provide dosimetry data; however, as a result of the low lead (lag) factor provided in Table 4.4.6.1.3-1, the charpy and tensile data will not provide predictive information for the neutron embrittlement damage for the NMP2 plant. Nevertheless, per the requirements of 10 CFR 50, Appendix H, NMPC will test the specimens and provide data for the national database.

#### **NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS**

10 CFR 50.91 requires that at the time a licensee requests an amendment, it must provide to the NRC its analysis using the standards in 10 CFR 50.92 concerning the issue of no significant hazards consideration. According to 10 CFR 50.92(c) a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

Involve a significant increase in the probability or consequences of an accident previously evaluated; or

Create the possibility of a new or different kind of accident from any accident previously evaluated; or

Involve a significant reduction in a margin of safety.

Niagara Mohawk Power Corporation (NMPC) has evaluated this proposed amendment pursuant to 10 CFR 50.91 and has determined that it involves no significant hazards considerations.

The following analyses have 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 change revises TS Table 4.4.6.1.3-1, titled "Reactor Vessel Material Surveillance Program – Withdrawal Schedule." The current reactor vessel material surveillance program schedules the withdrawal of capsule number 1 at 10 EFPY. The revised schedule would require withdrawal of capsule number 1 at 8 EFPY. Removal of the surveillance capsule in RFO7, for testing at an estimated 8.7 EFPY, satisfies the requirements of the NMP2 surveillance program. NMP2 satisfies the criteria in Section III.C of Appendix H to 10 CFR 50 (integrated surveillance program). Compliance with the criteria of Section III.C ensures that the effect of neutron irradiation on the NMP2 reactor vessel beltline materials will be monitored throughout the life of the plant. Therefore, this change will not significantly increase the consequences of any previously evaluated accident. Since the reactor vessel surveillance specimen capsules and the results of

analyses performed on the specimens contained therein are not assumed to be initiators of any design basis accident or transient, this change does not involve a significant increase in the probability 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 proposed change does not introduce any new failure modes. Removal of the surveillance capsule in RFO7, for testing at an estimated 8.7 EFPY, satisfies the requirements of the NMP2 surveillance program. NMP2 satisfies the criteria in Section III.C of Appendix H (integrated surveillance program). Compliance with the Section III.C criteria ensures that the effect of neutron irradiation on the NMP2 reactor vessel beltline materials will be monitored throughout the life of the plant. Therefore, this proposed change would not create the possibility of a new or different kind of accident from any accident 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.

Removal of the surveillance capsule in RFO7 for testing at an estimated 8.7 EFPY, satisfies the requirements of the NMP2 surveillance program. NMP2 satisfies the criteria in Section III.C of Appendix H (integrated surveillance program). Compliance with the 10 CFR 50, Appendix H, Section III.C criteria ensures that the effect of neutron irradiation on the NMP2 reactor vessel beltline materials will be monitored throughout the life of the plant. Therefore, the proposed amendment 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

#### Eligibility for Categorical Exclusion from Performing an Environmental Assessment

10 CFR 51.22 provides criteria for, and identification of, licensing and regulatory actions eligible for exclusion from performing an environmental assessment. NMPC has reviewed the proposed amendment and determined that it does not involve a significant hazards consideration, and there will be no significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, nor will there be any significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment is required to be prepared in connection with this license amendment application.

#### **ATTACHMENT D**

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

# Marked-Up Copy of the Proposed Changes to the Current Technical Specifications

Page 3/4 4-31 of the current TS has been marked-up by hand to reflect the proposed changes.

# TABLE 4.4.6.1.3-1

# REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM - WITHDRAWAL SCHEDULE

CAPSULE NUMBER	VESSEL LOCATION	LEAD FACTOR @ 1/4 T	WITHDRAWAL TIME (EFPY)
1	3°	0.46	(10)
2	1 <b>77°</b>	0.46	20
3	183°	0.46	Spare .

