Niagara Mohawk®

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September 6, 2001
NMP2L 2030

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

RE: Nine Mile Point Unit 2
Docket No. 50-410
NPF-69
TAC No. MB1163

Subject: ***Request for Additional Information (RAI) Regarding Proposed Amendment of Technical Specifications for Reactor Protection System Electric Power Monitoring Assemblies***

Gentlemen:

By letter dated February 27, 2001, Niagara Mohawk Power Corporation (NMPC) transmitted an application for amendment to the Nine Mile Point Unit 2 Technical Specifications (TSs). The proposed amendment would incorporate conservative TS overvoltage Allowable Values for the Reactor Protection System electric power monitoring assemblies.

On April 25, 2001, the NRC staff (Staff) e-mailed comments on the proposed TS amendment to NMPC licensing for review. On May 17, 2001, a telephone conference call was held with the Staff to resolve their comments. On June 26, 2001, the Staff issued an RAI summarizing the information that was verbally communicated by the NMPC licensing and engineering representatives participating in the conference call. The RAI requested NMPC to review the Staff's itemized summary of the information provided verbally and confirm, clarify, or otherwise correct their summary. Attached is NMPC's response to that request.

Very truly yours,

John H. Mueller
Senior Vice President and
Chief Nuclear Officer

Subscribed and Sworn to before me
on this 6th day of September, 2001

Sandra A. Oswald
NOTARY PUBLIC

SANDRA A. OSWALD
Notary Public, State of New York
No. 01OS6032276
Qualified in Oswego County
Commission Expires 10/25/01

A001

JHM/CDM/mlg
Attachment

cc: Mr. H. J. Miller, NRC Regional Administrator, Region I
Mr. G. K. Hunegs, NRC Senior Resident Inspector
Mr. P. S. Tam, Senior Project Manager, NRR (2 copies)
Mr. John P. Spath
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Records Management

NINE MILE POINT NUCLEAR STATION, UNIT NO. 2

REQUEST FOR ADDITIONAL INFORMATION

PROPOSED AMENDMENT ON REACTOR PROTECTION SYSTEM ELECTRICAL POWER MONITORING ASSEMBLIES

On May 17, 2001, the NRC staff conducted a telephone conference with Niagara Mohawk Power Corporation personnel. The NRC staff received verbal information on the following items. Please confirm, clarify, or otherwise correct the accuracy of the these items:

1. *The main steam isolation valve (MSIV) trip solenoids supplied by General Electric are designed for 40 years of operation if operated continuously at 125 volts (i.e., the solenoids' maximum design rating of 125 volts).*

Response to Item #1:

The following restatement of Item #1 corrects the information and provides additional clarification:

The main steam isolation valve (MSIV) trip solenoids supplied by General Electric (GE) are designed for 40 years of operation if operated continuously at 115 volts (i.e., the solenoids' nominal rating is 115 volts). The maximum design continuous rating for these solenoids is 125 volts. If the GE supplied solenoids were operated continuously at the maximum continuous rating of 125 volts, the qualified service life would be reduced to somewhat less than 40 years. Replacing the solenoids at a maximum interval of 2.18 years (see responses to Item #'s 2 and 4 below), provides assurance that the qualified service life is not exceeded.

2. *If operated at 128 volts (a voltage above the maximum design rating), the MSIV trip solenoids supplied by GE are designed for 2.2 years of operation (i.e., the solenoids have a qualified life of 2.2 years if operated continuously at 128 volts).*

Response to Item #2:

The following restatement of Item #2 corrects the information:

If operated at 128 volts (a voltage above the maximum design rating), the MSIV trip solenoids supplied by GE are designed for 2.18 years of operation (i.e., the solenoids have a qualified service life of 2.18 years if operated continuously at 128 volts).

3. *A voltage of 124 volts is the maximum normal voltage expected from the reactor protection system (RPS) power supplies.*

Response to Item #3:

The following restatement of Item #3 corrects the information and provides additional clarification:

The maximum normal (steady-state) voltage expected from the reactor protection system (RPS) power supplies for the scram pilot valve solenoids are as follows:

Motor-Generator Sets 1A/1B (normal source)	=	126.48/127.5 volts
Step-down Transformers (alternate source)	=	126.6 volts

The maximum normal (steady-state) voltage expected from the RPS power supplies for the MSIV trip solenoids are as follows:

Uninterruptible Power Supplies 3A/3B (normal source)	=	126.48 volts
Step-down Transformers (alternate source)	=	127.72 volts

4. *MSIV trip solenoids supplied by GE are replaced before they reach 2.2 years of operation at normal voltages.*

Response to Item #4:

The following restatement of Item #4 clarifies the information:

MSIV trip solenoids supplied by GE are replaced before they reach 2.18 years of operation at normal voltages.

5. *MSIV trip solenoids supplied by GE are in the process of being replaced with solenoids designed for 40 years of operation if operated continuously at 128 volts.*

Response to Item #5:

The following restatement of Item #5 corrects the information and provides additional clarification:

The MSIV trip solenoids supplied by GE are in the process of being replaced with solenoids designed for 40 years of operation if operated continuously at the nominal rating of 120 volts. The replacement solenoids have a maximum design continuous rating of 132 volts. Thus, the replacement solenoids have higher nominal and maximum continuous voltage ratings than the GE supplied solenoids (see response to Item #1). However, if the replacement solenoids were operated continuously at 128 volts, the qualified service life

would be less than 40 years. The improved electrical characteristics of the replacement solenoids may allow the qualified service life to be extended beyond the current 2.18 years.

6. *The proposed Technical Specifications (TSs) overvoltage Allowable Value change will reduce margin from 8 volts (132 volts, the current TS overvoltage Allowable Value, minus 124 volts, the maximum expected normal voltage from the RPS power supplies) to 4 volts (128 volts, the proposed TS overvoltage Allowable Value, minus 124 volts, the maximum expected normal voltage from the RPS power supplies).*

Response to Item #6:

The following restatement of Item #6 corrects the information and provides additional clarification:

The proposed Technical Specifications (TSs) overvoltage Allowable Value change for the RPS logic will reduce margin from 7.32 volts (133.8 volts, the current TS overvoltage Allowable Value, minus 126.48 volts, the maximum expected normal voltage from the RPS logic bus power supplies) to 3.32 volts (129.8 volts, the proposed TS overvoltage Allowable Value for Bus B, minus 126.48 volts, the maximum expected normal voltage from the RPS logic bus power supplies).

7. *The probability for tripping of an electric protective assembly (EPA) will not change due to a set point drift with a 4 versus 8 volt margin.*

Response to Item #7:

The following restatement of Item #7 corrects the information and provides additional clarification:

The probability for tripping of an electric protective assembly (EPA) will not change due to a set point drift for a 3.32 versus 7.32 volt margin. As discussed in the response to Item #6, the margin refers to the difference between the TS overvoltage Allowable Values for the EPAs and the maximum expected normal voltages from the RPS logic power supplies (the margin values indicated above were calculated for the RPS logic bus (Bus B) EPAs). A reduction in the set point drift was necessary to account for the reduced margin resulting from the proposed reduction in the TS overvoltage Allowable Value. As discussed in the response to Item #8 below, the proposed 184 day surveillance frequency accommodates the necessary reduction in set point drift without increasing the probability of tripping an EPA.

8. *Bypassing one EPA for testing and calibration does not adversely affect the probability for EPA trip (and thus reactor trip).*

Response to Item #8:

The following restatement of Item #8 confirms the information and provides additional clarification:

Bypassing one EPA for testing and calibration does not adversely affect the probability for EPA trip (and thus reactor trip). The proposed 184 day surveillance frequency for bypassing an EPA for performance of the channel calibration will not increase the probability for an EPA trip since performance of the channel functional test (SR 3.3.8.2.1 and SR 3.3.8.3.1) already requires each EPA to be bypassed at a 184 day frequency. Furthermore, although not previously required, it has been NMPC's practice to perform channel calibration checks at the 184 day frequency in conjunction with the channel functional tests for plant-specific EPA relay performance and drift data acquisition.

9. *The proposed calibration frequency of 184 days was selected to assure that there would be no change in the probability for EPA trip (and thus reactor trip) due to set point drift.*

Response to Item #9:

The following restatement of Item #9 clarifies the information:

The proposed calibration frequency of 184 days was selected based on analysis, which provides assurance that there will be no change in the probability for EPA trip (and thus reactor trip) due to set point drift. The drift data used to calculate the set points for the EPA overvoltage relays were based on analysis of actual drift values obtained from channel calibration checks performed in conjunction with the 184 day channel functional tests (see response to Item #8).