



Niagara Mohawk

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October 21, 1998
NMP1L 1372

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

RE: Nine Mile Point Unit 1
Docket No. 50-220
 DPR-63

Subject: Generic Letter 94-02, "Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-Hydraulic Instabilities in Boiling Water Reactors"

Gentlemen:

By letter dated July 11, 1994, the Commission issued Generic Letter (GL) 94-02, "Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-Hydraulic Instabilities in Boiling Water Reactors." GL 94-02 requested that each licensee take appropriate actions to augment its procedures and training for responding to thermal-hydraulic instabilities and to submit a plan describing the long-term stability solution option it had selected and the associated implementation schedule. The GL also requested that licensees inform the NRC following completion of the required actions. The purpose of this letter is to inform you that the actions required to implement Stability Solution Option II at Nine Mile Point Unit 1 (NMP1) are complete.

Niagara Mohawk Power Corporation's (NMPC) letter dated September 8, 1994, indicated that NMP1 would implement the Boiling Water Reactor Owners' Group (BWROG) solution Option II. Option II (Quadrant-Based APRM SCRAM), as delineated in NEDO-31960, indicates that the existing quadrant-based Average Power Range Monitor (APRM) systems of Boiling Water Reactor/2 plants (e.g., NMP1) will initiate a reactor scram when the magnitude of the expected oscillations are sufficiently less than would be needed to challenge the Minimum Critical Power Ratio (MCPR) safety limit.

Our letter dated October 2, 1995, submitted plant-specific analysis GENE-A13-00360-02, "Application of Stability Long-Term Solution Option II to Nine Mile Point Nuclear Station Unit 1." This analysis indicated that the NMP1 quadrant-based APRM system is adequate to detect and suppress reactor core oscillations. However, the analysis required that the APRM flow-biased trip setpoint be changed to limit the size of the oscillation magnitude prior to a reactor trip, thereby limiting the associated CPR change (and assuring compliance with the MCPR safety limit).

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As indicated in our letter dated December 15, 1995, NMPC decided to replace the existing APRM analog trip biased units with new digital Flow Control Trip Reference (FCTR) cards. These cards are similar to the cards developed for BWROG Enhanced Option I-A and are designed to cope with the increased complexity of the APRM flow-biased trip function settings required to implement Stability Solution Option II.

Consistent with the GENE-A13-00360-02 analyses, NMPC's letter dated October 9, 1997, stated that the APRM flow-biased trip setpoint contained in the NMP1 Technical Specifications (TS) would be changed. Our letter also noted the FCTR cards may be placed in service prior to approval of the TS amendment under the guidelines of 10CFR50.59. The APRM flow biased trip setpoint would remain within the existing TSs. The NRC's letter dated August 19, 1998, issued the NRC's safety evaluation regarding GENE-A13-00360-02 and our previous submittals responding to GL 94-02. As indicated in the NRC's letter, GENE-A13-00360-02 was found acceptable for use by NMPC and our responses constitute an acceptable basis for implementing Stability Solution Option II at NMP1.

As of September 22, 1998, the APRM analog trip biased units have been replaced with the new digital FCTR cards. The APRM flow-biased trip setpoint will be maintained within both the current TSs and as well as the setpoint determined in NRC accepted GENE-A13-00360-02 to preclude instabilities. Accordingly, the FCTR cards are currently operational to implement Stability Solution Option II. The associated TS amendment application to revise the APRM flow-biased trip setpoint to be consistent with GENE-A13-00360-02 will be submitted by November 20, 1998.

Sincerely,



Richard B. Abbott
Vice President Nuclear Engineering

RBA/JMT/sc

xc: Mr. H. J. Miller, NRC Regional Administrator
Mr. S. S. Bajwa, Director, Project Directorate I-1, NRR
Mr. B. S. Norris, Senior Resident Inspector
Mr. D. S. Hood, Senior Project Manager, NRR
Records Management



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UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of)

NIAGARA MOHAWK POWER CORPORATION)

Docket No. 50-220

Nine Mile Point Nuclear Station Unit 1)

Richard B. Abbott, being duly sworn, states that he is Vice President Nuclear Engineering of Niagara Mohawk Power Corporation; that he is authorized on the part of said Corporation to sign and file with the Nuclear Regulatory Commission the document attached hereto; and that the document is true and correct to the best of his knowledge, information, and belief.

NIAGARA MOHAWK POWER CORPORATION

By Richard B. Abbott
Richard B. Abbott
Vice President Nuclear Engineering

Subscribed and sworn to before me, a Notary Public in and for the State of New York and the County of Oswego, this 21 day of October, 1998.

Beverly W. Ripka
Notary Public

My Commission Expires:

2/28/2000

BEVERLY W. RIPKA
Notary Public State of New York
Qual. in Oswego Co. No. 4644879
My Commission Exp. Mar 31 1999
2/28/00

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