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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 72 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

In November 1980, the staff issued NUREG-0737, "Clarification of TMI Action Plan Requirements," which included all TMI Action Plan items approved by the Commission for implementation at nuclear power reactors. NUREG-0737 identifies those items for which Technical Specifications are required. A number of items which require Technical Specifications (TSs) were scheduled for implementation after December 31, 1981. The staff provided guidance on the scope of Technical Specifications for all of these items in Generic Letter 83-36. Generic Letter 83-36 was issued to all Boiling Water Reactor (BWR) licensees on November 1, 1983. In this Generic Letter, the staff requested licensees to:

1. review their facility's Technical Specifications to determine if they were consistent with the guidance provided in the Generic Letter, and

2. submit an application for a license amendment where deviations or absence of Technical Specifications were found.

By application dated June 29, 1984 and supplemented and clarified December 3, 1984, Niagara Mohawk Power Corporation (the licensee) requested an amendment to Appendix A of Operating License No. DPR-63 for Nine Mile Point Nuclear Station, Unit No. 1. The amendment request is in response to Generic Letter 83-36 and covers the following TMI items:

1. Reactor Coolant System Vents (II.B.1)
2. Containment High-Range Radiation Monitor (II.F.1.3)
3. Containment Pressure Monitors (II.F.1.4)
4. Containment Water Level (II.F.1.5)
5. Containment Hydrogen Monitor (II.F.1.6)

2.0 Evaluation

2.1 Reactor Coolant System Vents (II.B.1)

Our guidance for Reactor Coolant System (RCS) vents identified the need for at least one operable vent path at the high points of the isolation condenser in BWRs with isolation condenser and no high

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pressure injection other than normal feedwater or the control rod drive system. Generic Letter 83-36 also provided limiting conditions for operation and the surveillance requirements for the RCS vents. The licensee has proposed TSs for emergency cooling system high point vents that are consistent with our guidance. Therefore, we find the proposed TSs to be acceptable.

2.2 Containment High-Range Radiation Monitor (II.F.1.3)

The licensee has installed two drywell radiation monitors in Nine Mile Point Unit 1 that is consistent with the guidance of TMI Action Plan Item II.F.1.3. Generic Letter 83-36 provided guidance for limiting conditions for operation and surveillance requirements for these monitors. The licensee proposed TSs that are consistent with the guidance provided in our Generic Letter 83-36. Therefore, we conclude that the proposed TSs for Item II.F.1.3 are acceptable.

2.3 Containment Pressure Monitor (II.F.1.3), Containment Water Level (II.F.1.5), and Containment Hydrogen Monitor (II.F.1.6)

On December 17, 1982, all licensees of operating reactors, applicants for operating licenses and holders of construction permits were sent a copy of Generic Letter No. 82-33 (Supplement 1 to NUREG-0737). This letter included guidance on post-accident monitoring instrumentation through an endorsement of Regulatory Guide 1.97, Revision 2. Regulatory Guide 1.97, Revision 2 divides the post-accident monitoring instruments into three categories providing a graded approach to requirements depending on the importance to safety of the measurement of a specific variable. Category 1 includes the most stringent requirements and is intended for key variables. Category 2 includes less stringent requirements and generally applies to instrumentation provided to furnish information regarding the release of radioactive materials. Category 3 is intended to provide requirements that will ensure high-quality, off-the-shelf instrumentation is used for backup and diagnostic instrumentation. Although the Regulatory Guide does not include explicit guidance on technical specifications, it does state that the Category 1 instrumentation "should be available prior to an accident except as provided in paragraph 4.11, 'Exception,' as defined in IEEE Standard 279 or as specified in the Technical Specifications" (C.1.3.1). For Category 2 instrumentation, the Regulatory Guide states: "the out-of-service interval should be based on normal technical specification requirements on out-of-service for the system it serves where applicable or where specified by other requirements" (C.1.3.2).

Generic Letter 83-36, "NUREG-0737 Technical Specifications," dated November 1, 1983 requested that the licensee provide information regarding the implementation of Technical Specifications for certain NUREG-0737 items. In a letter dated June 29, 1984, the licensee

responded to the request for information provided in the above Generic Letter. In their original submittal, the licensee proposed, as the action statement for channel inoperability for Items II.F.1.4, II.F.1.5 and II.F.1.6, to initiate a preplanned alternate method of monitoring the appropriate parameter(s) within 72 hours only if the number of operable channels was less than the minimum number of channels (1). The inoperable channel(s) would then have to be restored to operable status within 7 days of the event or a Special Report would have to be submitted to the Commission within 14 days following the event.

The staff was concerned regarding (1) the lack of action to be taken if the number of operable channels were less than the total shown in Table 3.6.11-1, "Accident Monitoring Instrumentation" and (2) the absence of any justification(s) for not placing the plant in a hot shutdown condition if the minimum number of operable channels cannot be maintained for a certain time. The licensee responded to these staff concerns by providing a second submittal (letter dated December 3, 1984 from C. V. Mangan to Domenic B Vassallo). This submittal provided a revised action statement such that, if the total number of operable channels were less than the total shown in Table 3.6.11-1, the licensee would be required to submit a Special Report to the Commission within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status. In addition, the licensee provided acceptable justification for not placing the plant in a hot shutdown condition if the minimum number of channels cannot be maintained. Due to the BWR 2 design with the Mark I type containment, the instrumentation associated with TMI items II.F.1.4, 5 and 6 is inaccessible during operation and, therefore, cannot be maintained or repaired. In lieu of placing the plant in a hot shutdown condition, the licensee has provided back-up instrumentation to be used in the event of the inoperability of the instrumentation associated with these TMI items.

Based on the above, the staff has concluded that the licensee's planned operating procedures that address back-up instruments to be used in the event a channel(s) fails and the implementation of the revised action statements will be programmatic requirements that will provide incentive for the licensee to restore an instrument's operability as soon as practical and restrict plant operation to a minimum.

The staff finds the proposed changes to the Nine Mile Point, Unit 1 Technical Specifications pertaining to accident monitoring instrumentation permit the operation of the facility in a manner that is consistent with the licensing basis and the accident analysis and the guidance of NRC Generic Letter No. 83-36, "NUREG-0737 Technical Specifications."

Based on the above, the staff concludes that the proposed Technical Specification modifications concerning implementation of TMI Action Plan items II.F.1.4, II.F.1.5 and II.F.1.6 are acceptable.

3.0 Environmental Considerations

This amendment involves a change in the installation or use of a facility component located within the restricted area and a change in a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

4.0 Conclusion

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: April 1, 1985