

' UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 86 TO FACILITY OPERATING LICENSE NO. NPF-69

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION, UNIT NO. 2

DOCKET NO. 50-410

1.0 INTRODUCTION

By letter dated November 19, 1998, Niagara Mohawk Power Corporation (NMPC and the licensee) proposed a license amendment to change the Technical Specifications (TSs) for Nine Mile Point Nuclear Station, Unit No. 2 (NMP2). The proposed changes would change the surveillance frequencies in TSs 4.8.4.4a, "Surveillance Requirements--Reactor Protection System Electric Power Monitoring (RPS Logic)," and 4.8.4.5a, "Surveillance Requirements-Reactor Protection System Electric Power Monitoring (Scram Solenoids)," to require channel functional testing of the RPS Motor Generator Set (M/G) and RPS Uninterruptible Power Supplies (UPS) Electrical Protection Assemblies (EPAs) at least once every 6 months. These TSs currently require that channel functional testing be performed each time the plant is in cold shutdown for a period of more than 24 hours, unless performed within the previous 6 months.

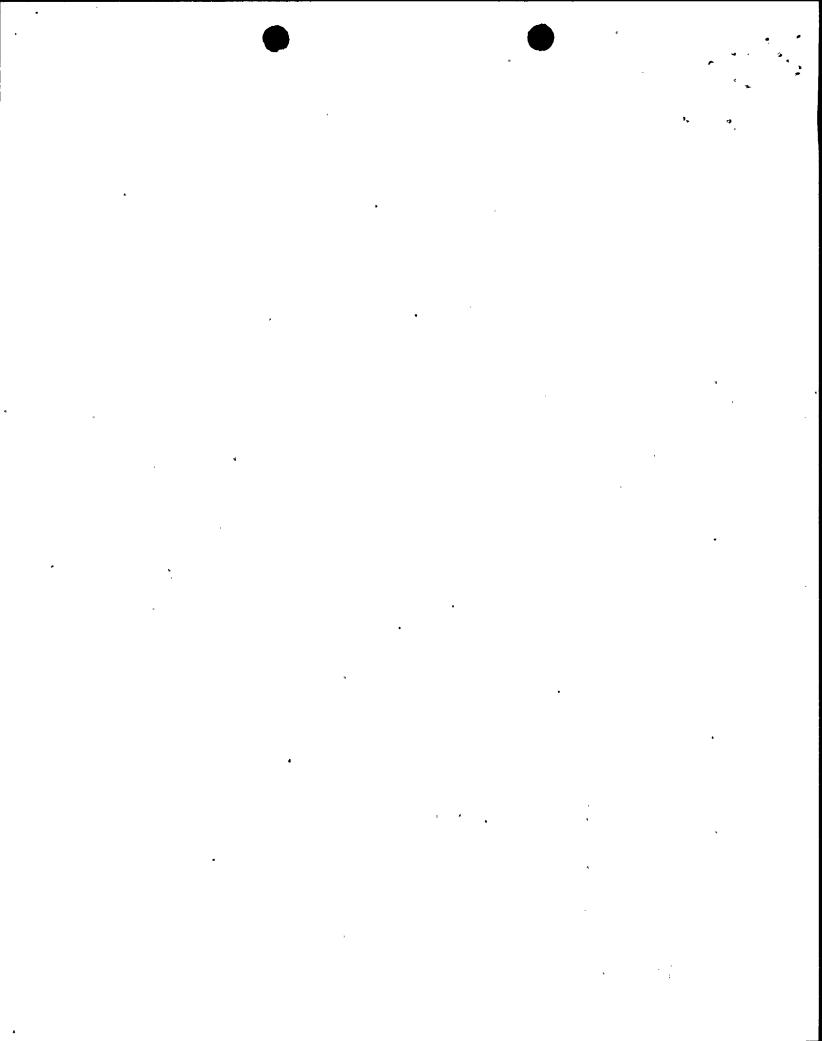
2.0 EVALUATION

During the last refueling outage (RFO6), NMPC modified the NMP2 design for the RPS M/G and RPS UPS EPAs to provide relay actuated protection systems. The relays of the new design may be individually isolated from an essential power circuit for testing and may be actuated without tripping the associated breaker. The relay actuated system allows the EPA system monitoring an essential power supply to be functionally tested with the plant on-line. On-line testing was not provided for by the previous design as it utilized logic cards to monitor system conditions and could not be isolated from the circuit for testing. The modification during RFO6 replaced the old system with new EPAs having three separate independent relays--an undervoltage, an overvoltage, and an underfrequency relay. These relays have normally-closed contacts that will change to the open state when the EPA senses voltage or frequency outside the required parameters. The three normally-closed contacts are arranged in series such that any contact opening will result in a loss of voltage to the breaker undervoltage release coil, causing the breaker to trip.

Channel functional testing can be performed by isolating the individual relay and its associated contacts by using test devices. This can be done without tripping the EPA breaker or losing the EPA loads.

The proposed 6-month testing interval in TS 4.8.4.4a and 4.8.4.5a is more conservative than the manufacturer's recommended 1-year interval. NMPC confirmed that the actual system

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conditions required for EPA actuation remain the same, and the relay setpoints for EPA relay actuation are not affected by the modification. In addition, the new design and the capability of testing the system online has increased the EPA reliability, did not involve a significant reduction in a margin of safety, and did not introduce any new or different accident initiators not previously evaluated.

Accordingly, the NRC staff finds that the proposed TS changes result in reliable RPS M/G and RPS UPS EPA system monitoring due to the recent design modifications and the increased frequency for testing. The proposed changes are, therefore, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (63 FR 71970). Accordingly, the 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 the amendment.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: March 18, 1999

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