# U.S. NUCLEAR REGULATORY COMMISSION

### **REGION I**

- Report No. 87-32
- Docket No. 50-410

License No. NPF-69

Category B

- Licensee: Niagara Mohawk Power Corporation 301 Plainfield Road Syracuse, New York 13212
- Facility: Nine Mile Point Unit 2
- Location: Scriba, New York

Dates: September 1, 1987 to September 8, 1987

- Inspectors: W.A. Cook, Senior Resident Inspector C.S. Marschall, Resident Inspector
  - W.L. Schmidt, Resident Inspector

Approved by:

Jon K. Johnson J.R. Johnson, Chief, Reactor Projects Section 2C, DRP

9/15/87

Date

#### **INSPECTION SUMMARY:**

<u>Areas</u> <u>Inspected</u>: Special inspection by resident inspectors to review the events leading to the shutdown on September 2, 1987 required by Technical Specifications. This inspection involved 54 hours by the inspectors.

<u>Results</u>: A sequence of events is discussed in section 2. Five apparent violations are discussed in section 3.

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## DETAILS

#### 1. Purpose

The purpose of this special safety inspection was to review the circumstances leading to the shutdown initiated at Nine Mile Point Unit 2 to comply with Technical Specifications (TS) on September 2, 1987.

## 2. Event Chronology

The following is a chronology of the important events:

- -- In early June 1987, a cumulative count of operating hours for each Standby Gas Treatment (SBGT) train was conducted, based on the run times documented in the Chief Shift Operator (CSO) logs. This action was prompted by NRC inspector review during an Operational Readiness Team Inspection (Inspection Report No. 50-410/87-16). The A train of SBGT was determined to have 440 hours and the B train to have 200 hours of cumulative run time at the end of May 1987.
- -- Both SBGT trains were operated during the months of June, July and August 1987. The SBGT trains were operated for normal surveillance testing, venting of the containment drywell and, on occasion, due to spurious actuations.
- -- On September 1, 1987 at 1:20 p.m., the Division II emergency diesel generator (EDG) was removed from service so that modification work could be performed. Prior to removing the Division II EDG from service, the requirements of TS Limiting Condition for Operation (LCO) action statement 3.8.1.1.e were reviewed and logged as completed in the Station Shift Supervisor (SSS) log.
- -- Approximately three hours after the Division II diesel was taken out of service, on September 1, 1987, calculations for the run time on SBGT train A indicated that the train had been run for 785 hours, in excess of the TS 4.6.5.3.c surveillance limit of 720 hours. This cumulative run time was based on a review of the CSO logs through the end of July 1987.
- Subsequent to the above determination, Operations management immediately contacted the corporate licensing staff to determine if the standard 25% variance in surveillance frequency applied to TS surveillance 4.6.5.3.c limit. Operations was told verbally that the 25% variance was applicable. This made the maximum allowable surveillance frequency 900 hours. At that time, Operations management did not continue with the SBGT run time review because it was thought that the 900 hour limit would not be exceeded.



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. . On September 2, 1987, the review of the cumulative run time on the A train of SBGT was continued and it was determined to have exceeded the 900 hour surveillance requirement (1120 actual hours). Based on this determination, the A train was declared inoperable and Unit ^management was informed.

At 5:35 p.m. on September 2, 1987, a reactor shutdown was commenced to comply with TS 3.8.1.1.e, due to train A of SBGT being inoperable while the Division II EDG was also out of service.

#### 3. <u>Inspector Findings</u>

a. Failure to comply with a Technical Specification Surveillance requirement to sample SBGT charcoal filters after 720 hours of operation:

On September 1, 1987, after the Division II emergency diesel generator (EDG) was removed from service, Operations Department management became aware that the limit for accumulated run time hours on train A of SBGT was exceeded. The licensee subsequently determined on September 2, 1987 that the total number of run hours on train A was greater than 1100. The purpose for tracking accumulated run hours is to ensure a sample of charcoal filter adsorber medium is drawn and chemically analyzed in accordance with TS surveillance requirement 4.6.5.3.c., (after 720, plus or minus 25%, hours of operation). The analysis determines if the charcoal still has its adsorbing properties for iodine. The failure to sample train A charcoal filter medium after 720 hours of operation is an apparent violation of T.S. 4.6.5.3.c. VIOLATION (50-410/87-32-01)

b. Failure to inform the Station Shift Supervisor (SSS) of the potentially inoperable SBGT trains:

On September 1, 1987, Operations management knew that train A of SBGT had exceeded 720 hours of cumulative run time, but did not believe that the total run time exceeded 900 hours. The licensee was unable to provide an adequate reason for the belief. In addition, the cumulative run time for the B train was uncertain. T.S. 6.8 and Regulatory Guide 1.33 require that the licensee implement administrative procedures for personnel authorities and responsibilities for the safe operation of the plant. Administrative Procedure 1.2, section 4.1 states that under the general direction of the Superintendent of Operations, the SSS's function includes ensuring that the plant is operated safely and within the license and Technical Specifications. When the operability of the SBGT trains was first in question, the SSS was not informed of the status of the surveillance testing requirement, and therefore, not afforded the opportunity to make an operability determination of the SBGT system. This is an apparent violation of T.S. 6.8 and procedure AP 1.2. VIOLATION (50-410/87-32-02)

c. From approximately mid-June, 1987 to September 1, 1987, the licensee did not know the total run time on either train of SBGT. This led to two apparent violations of TS Limiting Condition for Operation 3.8.1.1.e:



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Failure to recognize that that train A of SBGT was inoperable when the Division II EDG was taken out of service:

When the Division II EDG was removed from service, TS 3.8.1.1.e required that the licensee verify that all systems that depend on the remaining operable EDG as a source of emergency power are also operable. The SSS verified that the surveillance tests in the surveillance schedule computer printout were up-to-date and that no out-of-service equipment entries were made in the Equipment Status Log for components or systems that rely on Division I EDG for emergency power. In addition, the Division II EDG outage was a preplanned evolution and the inspectors could find no evidence that a detailed management review was conducted, in advance, to ensure compliance with TS 3.8.1.1.e. In that the licensee did not verify that surveillance testing on the A train of SBGT was current, the licensee failed to comply with the LCO requirement of TS 3.8.1.1.e. This is an apparent violation of T.S. 3.8.1.1.e. VIOLATION (50-410/87-32-03)

-- Failure to be in HOT SHUTDOWN within 12 hours after the cumulative run time on the A SBGT train exceeded the required 720 hours (+25%) in conjunction with the inoperability of the Division II EDG.

Shortly after the Division II EDG was removed from service on September 1, 1987, the licensee identified that the operablility of train A of SBGT was in question. Although a TS interpretation was made that a 25% variance applies to the 720 hours surveillance frequency, the licensee did not verify that the plus 25% (900 hours) limit was not exceeded. TS 3.8.1.1.e requires that the unit be placed in HOT SHUTDOWN within 12 hours and COLD SHUTDOWN in the following 24 hours, if the operability of systems dependent on the operable EDG are not verified. The licensee did not take action within the allowable TS action statement to shutdown the unit when the operability of the SBGT system came into question. This is an apparent violation of T.S. 3.8.1.1.e. VIOLATION (50-410/87-32-04)

d. Failure to take prompt and effective action on a previously identified item:

During the Operational Readiness Team inspection conducted during the first few weeks in June 1987, a deficiency was noted in the licencee's program for tracking the accumulated run hours on the two redundant Standby Gas Treatment System trains. During this inspection, it was not clear by whom or how these hours were being tracked. Prior to the end of the team inspection, the inspector was shown documentation on SBGT system run hours accumulated through May 1987.



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Based on this earlier inspection, the licensee initiated changes to the SBGT system operating procedures. The changes to the procedures incorporate a log sheet to be completed by the control room operators when a train of SBGT has been operated. These procedure changes were not incorporated into the procedure until August 31, 1987. In addition, no interim action was taken by the licensee to ensure a current status of SBGT train run times was maintained. 10 CFR 50, Appendix B, Criterion XVI, requires that conditions adverse to quality be promptly identified and corrected. NMPC Quality Assurance Program Topical Report for Nine Mile Point Nuclear Station Operations, QATR-1, Revision 2; states that program and hardware conditions adverse to quality are identified promptly and corrected as soon as practical. Failure to take prompt and appropriate corrective action for this previously identified deficiency is an apparent violation of 10 CFR, Appendix B, Criterion XVI, and the NMPC QA program. VIOLATION (50-410/87-32-05)

#### 4. Exit Meeting

At the conclusion of the inspection, a meeting was held with senior corporate and station management to discuss the scope and findings of this inspection.

Based on the NRC Region I review of this report and discussions held with licensee representatives, it was determined that this report does not contain Safeguards or 10 CFR 2.790 information.

