

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-410/86-14

Docket No. 50-410

License No. CPPR-112

Licensee: Niagara Mohawk Power Corporation

300 Erie Boulevard, West

Syracuse, New York 13202

Facility Name: Nine Mile Point Nuclear Station, Unit 2

Inspection At: Scriba, New York

Inspection Conducted: March 31 - April 4, 1986

Inspector: M. Evans
M. Evans, Reactor Engineer

4/18/86
date

Approved by: J. E. Briggs
for P. Eselgroth, Chief
Test Programs Section, OB

4/21/86
date

Inspection Summary: Inspection on March 31 - April 4, 1986 (Report No. 50-410/86-14)

Areas Inspected: Routine, unannounced inspection by one region based inspector of preoperational test program review, preoperational test procedure review, preoperational test witnessing, QA interface with the preoperational test program, independent verification and plant tours.

Results: No violations were identified.

NOTE: For acronyms not defined, refer to NUREG-0544 "Handbook of Acronyms and Initialisms."

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DETAILS1.0 Persons Contacted

- R. Abbott, Station Superintendent
- *C. Beckham, Manager, Quality Assurance (QA) Projects
- *D. Caplette, Special Projects (SWEC)
- *J. Drake, Startup Special Projects Supervisor (SWEC)
- *P. Eddy, Site Representative
- J. Gaines, Test Group Supervisor
- W. Hansen, Manager, Nuclear Quality Assurance Operations
- *T. Lee, Special Projects
- J. Orlando, Operations QA Supervisor
- T. Perkins, General Superintendent
- J. Perry, Vice President Quality Assurance
- *M. Ray, Manager, Special Projects
- *I. Weakley, Special Projects

Other NRC Personnel

- R. Gramm, Senior Resident Inspector, Construction
- *S. Hudson, Senior Resident Inspector, Operations

*Denotes those present at the exit meeting conducted on April 4, 1986.

The inspector also contacted other members of the licensee's technical and QA staff.

2.0 Preoperational Test Program Review2.1 Scope

The inspector completed a review of the licensee's preoperational test program to verify that formal administrative measures had been established to control the conduct of preoperational testing including:

- A description of the preoperational test program and assignment of responsibilities;
- A method to control turnover of systems from the constructor to the startup department;
- A formal method to control preoperational test procedure format, content, review and approval and changes to procedures;
- A formal method to control interruption of testing and retest requirements;
- A formal method to control calibration and issuance of measuring and test (M&T) equipment; and



- A method to control lifted leads, jumpers and temporary modifications.

2.2 Discussion

The inspector reviewed the Startup Administrative Procedures (SAP) listed in Attachment A and verified that the administrative measures identified in Paragraph 2.1 above were established.

2.3 Findings

No unacceptable conditions were identified within the scope of this review.

3.0 Preoperational Test Procedure Review and Verification

3.1 Scope

The Preoperational Test Procedures (POT's) identified below were reviewed in preparation for test witnessing, for technical and administrative adequacy and to independently verify that testing is planned to adequately satisfy regulatory guidance and licensee commitments. They were also reviewed to verify licensee review and approval, proper format, test objectives, prerequisites, initial conditions, test data recording requirements and system return to normal.

- N2-POT-11, Service Water, Revision 1, approved March 15, 1986.
- N2-POT-31, RHR System, Revision 2, approved March 14, 1986.
- N2-POT-34, Auto Depressurization System, Revision 0, approved February 5, 1986.

3.2 Discussion

During the review of the above POT's, the inspector independently verified the acceptance criteria stated in the procedures were correct when compared to the acceptance criteria listed in the Nine Mile Point Unit 2 Final Safety Analysis Report (FSAR), Chapter 14 and G.E. Preoperational Test Specification 22A2271BA. The inspector had several minor questions which were satisfactorily answered by the licensee.

3.3 Findings

No violations were identified.



4.0 Preoperational Test Witnessing

4.1 Scope

Testing witnessed by the inspector included the following observations of overall crew performance:

- Approved procedure with latest revision available and in use by test personnel;
- A designated person in charge and conducting the test;
- Minimum test personnel requirements met;
- Qualified personnel performing the test;
- Test precautions followed and prerequisites met;
- QA/QC hold and witness requirements met (QA engineer present);
- Proper plant supporting systems in service;
- Special test and measuring equipment required by the test procedure, its calibration and use;
- Procedure is technically adequate for the test;
- Testing being performed as required by the test procedure; and,
- Test personnel actions appeared to be correct and timely during performance of the test.

4.2 Discussion

The inspector observed several portions of the performance of pre-operational test procedure N2-POT-31, Residual Heat Removal (RHR) System.

On April 1, 1986, the inspector witnessed performance of sections 4.2.14.1 through 4.2.14.11 for the Division 1 LOCA Interlock Checks. On April 3, 1986, performance of Section 4.2.22, RHR Pump B performance curve and suppression pool spray flow testing was observed. All testing was conducted in accordance with the criteria of paragraph 4.1 above.

4.3 Findings

No unacceptable conditions were observed.



5.0 QA Interface With the Preoperational Test Program

5.1 Discussion

The inspector reviewed several recent Nuclear Quality Assurance Surveillance Reports (QASR) regarding various activities of the licensee's startup department. The following QASR's were reviewed:

- QASR-86-10245, witnessing of a retest of the automatic initiation and vessel injection capability of the Low Pressure Core Spray (LPCS) System, conducted under N2-POT-32 on March 9, 1986. Valve 2CSC*MOV-104 failed to close during the initial test. Deficiency Report (DR) #13885 was issued and the valve was subsequently modified. On retest, vessel injection was successfully achieved, however the results of the test were negated when the valve again failed to close. The test engineer issued Problem Report (PR) #3424 to reinvestigate the problem.

- QASR's 86-10190, 86-10258, 86-10263 and 86-10269; surveillances of the performance of POT prerequisites for N2-POT-100B, High Pressure Core Spray Diesel Generator (conducted March 5, 1986); N2-POT-11, Service Water (conducted March 16-17, 1986); N2-POT-100A-2, Division 2 Emergency Diesel Generator (conducted March 17, 1986); and N2-POT-31, RHR System (conducted March 18, 1986). The QA inspectors used QA Prerequisite checklists SQA-5-047-85, Revision 2; SQA-S-130-86, Revision 1; and SQA-S-080-85, respectively, to check various attributes of the above procedures prior to actual testing. For all surveillances, the QA inspectors noted that the prerequisites were satisfactorily accomplished.

5.2 Findings

No unacceptable conditions were identified.

6.0 Independent Verification

The inspector independently verified that the acceptance criteria stated in POT-11, POT-31 and POT-34 satisfied the appropriate reference documents as stated in paragraph 3.2 of this report. Also, during the RHR test witnessing discussed in paragraph 4.2 of this report, the inspector independently verified suppression pool spray flow by direct observation in containment.

7.0 Plant Tours

The inspector toured various areas of the facility to observe work in progress, housekeeping, cleanliness controls and status of construction and testing activities.



7.1 Findings

No violations were observed.

8.0 Exit Interview

A management meeting was held at the conclusion of the inspection on April 4, 1986 to discuss the inspection scope, findings and observations as detailed in this report (see Paragraph 1 for attendees). No written information was provided to the licensee at any time during this inspection. The licensee did not indicate that any proprietary information was contained within the scope of this inspection.



ATTACHMENT A

<u>Procedure Number</u>	<u>Procedure Title</u>	<u>Rev. No</u>	<u>Approval Date</u>
N2-SAP-100	Startup and Test Program Description & Organization	2	12/10/84
N2-SAP-102	Joint Test Group	1	12/10/84
N2-SAP-103	Quality Assurance and Control	0	12/18/84
N2-SAP-105	Test Index	1	10/25/85
NC-SAP-106A	Test Procedure Format	2	10/25/85
N2-SAP-106B	Test Procedure Review, Approval and Revision	2	10/25/85
N2-SAP-106C	Conduct of Testing	1	10/23/85
N2-SAP-107A	System Release	2	10/25/85



N2-SAP-107B	System Turnover	1	10/23/85
N2-SAP-108	Planning and Scheduling	2	10/25/85
N2-SAP-109	Qualification and Certification of Startup and Test Personnel	1	07/01/85
N2-SAP-110	Training of Startup and Test Personnel	1	10/23/85
N2-SAP-114	Preventive Maintenance of Plant Equipment and Systems	1	12/02/85
N2-SAP-115	Control of Measuring and Test Equipment	1	10/28/85
N2-SAP-117	Work Control and Work Control Report	6	02/15/86
N2-SAP-118	Temporary Modifications	1	12/05/85
N2-SAP-121A	Deficiency Reporting System	4	12/20/85
N2-SAP-121B	Deficiency Tracking System	1	10/28/85

