

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-410/87-15

Docket No. 50-410

License No. NPF-54

Licensee: Niagara Mohawk Power Corporation

301 Plainfield Road

Syracuse, New York 13212

Facility Name: Nine Mile Point Nuclear Station, Unit 2

Inspection At: Scriba, New York

Inspection Conducted: May 11-15, 1987

Inspectors: *M. H. Evans*  
*for* L. J. Wink, Reactor Engineer, DRS

5/28/87  
date

Approved by: *D. J. Flores*  
*for* D. J. Flores, Acting Chief,  
Test Programs Section, OB, DRS

5/28/87  
date

Inspection Summary: Inspection on May 11-15, 1987 (Inspection Report No. 50-410/87-15)

Areas Inspected: Routine, unannounced inspection by one region-based inspector of preoperational test results review, overall power ascension test program, power ascension test procedures review, operations surveillances, QA interfaces, independent verifications and plant tours.

Results: No violations were identified.

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



## DETAILS

### 1.0 Persons Contacted

#### Niagara Mohawk Power Corporation

- \*R. Abbott, Station Superintendent - Unit 2
- G. Carlisle, Lead STD&A Engineer
- M. Colomb, Station Shift Supervisor
- \*J. Conway, Power Ascension Manager
- \*P. Eddy, Site Representative, New York State, PSC
- J. Harris, Shift Test Supervisor
- K. Korcz, Licensing Engineer - Unit 2
- \*T. Newman, Supervisor, Operations QA Surveillance
- T. Pao, Shift Test Supervisor
- T. Perkins, General Superintendent
- \*A. Pinter, Site Licensing Coordinator
- \*N. Rademacher, Manager, QA Programs - Unit 2
- T. Sullivan, BOP Test Engineer

#### Other NRC Personnel

- \*W. Cook, Senior Resident Inspector
- \*W. Schmidt, Resident Inspector

\* Denotes those present at the exit meeting on May 15, 1987.

The inspector also contacted other members of the Licensee's Technical, Test, QA and Operations staff.

### 2.0 Preoperational Test Results Review

#### 2.1 Scope

Preoperational Test Procedure N2-POT-1-4, Main Steam Isolation Valves, Revision 1, was performed following the completion of modifications to replace the MSIV ball valves with standard Y-pattern MSIVs. The completed test results package was reviewed to verify that adequate testing had been conducted to satisfy regulatory guidance, licensee commitments and FSAR requirements.

#### 2.2 Discussion

The inspector reviewed the test results and verified the licensee's evaluation of the test results by review of test changes, test exceptions, test deficiencies, "AS-Run" copy of the test procedure, acceptance criteria, performance verification, recorded conduct of the test, restoration of system to required lineup following the test, independent verification of critical steps or parameters and identification of personnel conducting the test and evaluating the



data. On May 12, 1987, the inspector attended the Station Operations Review Committee (SORC) meeting at which the test results were reviewed and approved.

The inspector reviewed the applicable sections of the Nine Mile Point Unit 2 Final Safety Analysis Report and Regulatory Guide 1.68, "Initial Test Programs for Water Cooled Nuclear Power Plants," Revision 2, August 1978, and verified that licensee testing commitments and the appropriate acceptance criteria had been incorporated into the procedure.

In addition, the inspector reviewed the completed Operations Surveillance Test NS-OSP-MSS-CS001, Main Steam Isolation Valve Operability Test, Revision 1, which was used as part of the preoperational Test to program the actual valve closure timing and verified that all the MSIVs fast close within the technical specification limit of 3 to 5 seconds.

The inspector had several questions concerning control of limit switch positions used in valve timing and the test method to verify that the undervoltage setpoints of the Electric Protection Assemblies (EPAs) are conservative. The Power Ascension Manager (PAM) and System Test Engineer were able to adequately address these questions.

### 2.3 Findings

No deficiencies were identified within the scope of this review.

## 3.0 Power Ascension Test Program (PATP)

### 3.1 References

- Regulatory Guide 1.68, Revision 2, August 1978 "Initial Test Program for Water Cooled Nuclear Power Plants."
- ANSI N18.7-1976 "Administrative Controls and Quality Assurance for Operations Phase of Nuclear Power Plants."
- Nine Mile Point Unit 2 (NMP-2) Technical Specifications, Revision 0, October 31, 1986.
- NMP-2 Final Safety Analysis Report (FSAR) Chapter 14 "Initial Test Program."
- NMP-2 Safety Evaluation Report
- NMP-2 AP-1.4, Startup Test Phase, Revision 3



### 3.2 Overall Power Ascension Test Program

The inspector held discussions with the Power Ascension Manager (PAM) and the Lead Startup Test, Design and Analysis (STD&A) Engineer and other members of the PATP staff to assess the overall readiness to begin low power testing. All test procedures required to support low power testing have been formally approved and issued. Current plans call for the shift test personnel to begin continuous shift coverage early next week to support a projected initial criticality on May 20th. Working copies of all low power test procedures were being issued and verified at the conclusion of this inspection.

The inspector reviewed the most recent revision of the administrative procedures governing the PATP. AP-1.4, Startup Test Phase, Revision 3, approved March 2, 1987 and AP-8.7, Power Ascension Test Procedures, Revision 2, approved March 2, 1987 were reviewed to verify that adequate administrative controls have been established to govern PATP activities. The procedures were found to contain acceptable controls.

### 3.3 Power Ascension Test Procedure Review

#### Scope

The procedures listed in Attachment A were reviewed for conformance to the requirements and guidelines of the references listed above and the attributes previously defined in Inspection Report No. 50-410/86-38.

#### Discussion

The procedures reviewed were found to be acceptable. Some of these procedures (identified by an asterisk) were new revisions of previously reviewed procedures which reflect an ongoing licensee followup review of issued procedures.

In addition to these PATP procedures, the inspector reviewed the station operations and surveillance procedures that will be employed during the initial criticality evolution to ensure proper interface with the test procedures. Station procedures reviewed included:

N2-OP-101A, Plant Start-up, Revision 2

N2-OSP-NMS-SU001, SRM/IRM Overlap Check, Revision 0

N2-RPSTP-2, Cold Critical Comparison, Revision 0

#### Findings

No deficiencies were identified.



#### 4.0 Surveillance Test Activities

##### Scope

The inspector reviewed a sample of completed Operations Department Surveillance Tests as part of the continuing review of surveillance activities to support initial criticality and plant heatup. The completed surveillance procedures listed in Attachment B were reviewed to verify that Technical Specification requirements were adequately addressed and satisfied.

##### Discussion

The inspector determined that the completed surveillance test results listed in Attachment B satisfied the applicable technical requirements.

##### Findings

No deficiencies were identified.

#### 5.0 QA Interface

The inspector noted that all PATP procedures had been reviewed by QA prior to issuance. A representative of QA participated in the SORC review and approval of preoperational test N2-POT-1-4, discussed in Section 2.0.

##### Findings

No unacceptable conditions were identified.

#### 6.0 Independent Measurements and Verifications

The inspector independently calculated MSIV fast closure times using GETARS traces during the evaluation of the test results of operations surveillance N2-OSP-MSS-CS001 as discussed in Section 2.2. The times calculated by the inspector agreed with those determined by the licensee.

#### 7.0 Plant Tours and Meetings

The inspector made several tours of various areas of the facility to observe work in progress, general housekeeping and cleanliness controls and the overall status of the facility to support initial criticality and low power testing. No unacceptable conditions were identified.

On May 13, 1987 the inspector attended a senior management meeting between the Regional Administrator, Region I, and the Senior Vice President, Niagara Mohawk Power Corporation, at which the overall plant status, readiness for initial criticality and low power testing, and plans for power ascension testing were discussed.



## 8.0 Exit Interview

At the conclusion of the inspection on May 15, 1987, an exit meeting was held with licensee personnel (identified in Section 1.0) to discuss the inspection scope, findings and observations as detailed in this report. At no time during the inspection was written materials provided to the licensee by the inspector. Based on the NRC Region I review of this report and discussions held with licensee representatives during the inspection, it was determined that this report does not contain information subject to 10 CFR 2.790 restrictions.



ATTACHMENT A

POWER ASCENSION TEST PROCEDURES REVIEWED

- \* N2-SUT-5-HU Control Rod Drive System, Revision 2, approved February 4, 1987
- \* N2-SUT-6-HU SRM Performance, Revision 3, approved May 7, 1987
- \* N2-SUT-10-HU IRM Performance-Heatup, Revision 2, approved February 4, 1987
- \* N2-SUT-12-HU APRM Calibration, Revision 2, approved February 19, 1987
- \* N2-SUT-14-HU RCIC System, Revision 4, approved May 12, 1987
- N2-SUT-75-HU Dyrwell Cooling System, Revision 1, approved February 12, 1987
- N2-SUT-77-HU BOP and Small Bore Piping Vibration, Revision 1, approved November 28, 1986
- N2-SUT-78-HU BOP System Expansion, Revision 1, approved March 16, 1987
- N2-SUT-81-HU Penetration Cooling Test Condition HU, Revision 1, approved February 10, 1987



ATTACHMENT B

OPERATIONS SURVEILLANCE PROCEDURES RESULTS EVALUATED

N2-OSP-ADS-M002	Monthly Channel Function Test of ADS Automatic Initiation Time Delay Relays, Revision 1, completed April 16, 1987
N2-OSP-CCP-Q001	Reactor Building Closed Loop Cooling Water System Valve Operability Test, Revision 0, completed April 25, 1987
N2-OSP-CMS-Q001	Containment Monitoring System Valve Operability Test, Revision 0, completed February 14, 1987
N2-OSP-CSH-Q002	HPCS Pump and Valve Operability and System Integrity Test, Revision 1, completed March 22, 1987
N2-OSP-CSH-R001	High Pressure Core Spray System Functional and Response Time Test, Revision 1, completed April 28, 1987
N2-OSP-CSL-R001	Division I ECCS Functional Test, Revision 0, completed April 23, 1987
N2-OSP-EGS-R005	Operating Cycle Diesel Generator ECCS Start Division III, Revision 0, completed August 1, 1986.
N2-OSP-ENS-M001	Monthly Functional Test of 4.16kV Emergency Bus Loss and Degraded Voltage, Revision 1, completed May 7, 1987
N2-OSP-RDS-M001	Scram Discharge Volume Vent and Drain Valve Position Verification, Revision 0, completed April 26, 1987
N2-OSP-RDS-Q001	Scram Discharge Volume Vent and Drain Valve Operability Test, Revision 0, completed March 12, 1987
N2-OSP-RPS-M004	Manual Scram Channel Functional Test, Revision 0, completed April 28, 1987
N2-OSP-RPS-R301	RPS Logic System Functional, Revision 0, completed April 12, 1987
N2-OSP-SLS-Q001	Standby Liquid Control Pump, Check Valve, and Relief Valve Test, Revision 0, completed February 17, 1987
N2-OSP-SLS-R004	Operating Cycle SLCS Initiation Channels Functional Test, Revision 0, completed July 23, 1986

