U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-410/85-30

Docket No. 50-410

License No. CPPR-112 Priority -- Category B

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: September 9-13, 1985

Inspectors: L E Briggs 10/4/85
L. Briggs, Lead Reactor Engineer date

Approved by: D. Florek for 10/9/85
P. Eselgroth, Chief date
Test Programs Section, OB

Inspection Summary: Inspection on September 9-13, 1985
(Report No. 50-410/85-30)

Areas Inspected: Route, unannounced inspection by one region based inspector (37 hours) of the preoperational test program, procedure review and verification, QA/QC interface with the preoperational test program, independent verification and plant tours.

Results: No violations were identified.

DETAILS

1.0 Persons Contacted

*T. Arrington, Resident Manager Field Quality Control (FQC)(SWEC)
*W. Baker, Special Projects
*T. Baumgartner, QA Supervisor, Stone and Webster Engineering Co. (SWEC)
*C. Beckham, QA Manager
*G. Blackburn, Startup Test Group Manager
*J. Bufis, Startup Test Group Manager
*J. Gallagher, Site Licensing Engineer (SWEC)
J. Gates, Test Group Supervisor
*W. Hansen, Startup QA Manager
*T. Koleski, Special Projects
*T. Lee, Special Projects
*R. Matlock, Deputy Project Manager
J. Orlando, Supervisor Test Activities, Startup QA
*A. Rovetti, Assistant Manager, Administrative Services (SWEC)
E. Schroder, Licensing Supervisor
*C. Terry, Project QA Manager (SWEC)

Other NRC Personnel Present

*L. Doerflein, Project Engineer
*R. Gramm, Senior Resident Inspector
*S. Hudson, Senior Resident Inspector

*Denotes those present at the exit meeting conducted on September 13, 1985.

2.0 Preoperational Test Program Review

2.1 Review of Proposed Final Safety Analysis Report Revision

2.1.1. Discussion

Initial review of the licensee's preoperational test program administrative procedures was conducted during NRC Inspection 50-410/85-01 and found acceptable. However, at that time the licensee was in the process of proposing certain revisions to Chapter 14 of the Final Safety Analysis Report (FSAR) which would affect the preoperational test program. During this inspection the inspector performed an independent comparison of the proposed Chapter 14 to Regulatory Guide (RG) 1.68, "Initial Test Programs for Water-Cooled Nuclear Power Plants", Revision 2. The licensee's proposal eliminated all acceptance tests from Chapter 14 of the FSAR and commits to performance of Preoperational Tests (POT) to satisfy RG 1.68. The

inspector found the proposed revision to Chapter 14 of the FSAR to meet the guidance contained in Appendix A.1 of RG 1.68 with one exception. The proposed Chapter 14 revision did not commit to performance of the Reactor Internals Vibration Test as required by the licensee's commitment to RG 1.20, "Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing", Revision 2.

The inspector noted that a reactor internal vibration test was scheduled to be conducted during power escalation testing vice preoperational testing and that testing would meet the requirements of a Non-Prototype, Category 1 vessel per RG 1.20. Reactor internals vibration testing is normally conducted prior to fuel load so that vessel pre and post inspection can be conducted without consideration of radiological hazards. R.G. 1.20 Paragraph 3.1, Non Prototype, Category 1 allows a vibration measurement program and analysis in place of visual inspection of reactor vessel internals; however, visual inspection is required if abnormal readings are obtained.

2.1.2 Findings

No violations were identified.

2.2. Preliminary Testing

2.2.1 Discussion

During discussions with the Senior Resident Inspector (SRI) and review of the proposed FSAR Chapter 14 revision the inspector noted that the licensee planned to use selected preliminary test procedures to satisfy FSAR Chapter 14 commitments. The proposed revision stated that preliminary test procedures (PTP) used to satisfy POT acceptance criteria would receive Joint Test Group (JTG) approval and JTG test results review and approval (same review as POT). The inspector noted that PTP's to be used for that purpose were not listed in the proposed Chapter 14 revision. The SRI had previously requested such a list from the licensee to allow NRC review and observation of PTP performances. The licensee stated that the list would be provided as soon as possible. The inspectors informed the licensee that any PTP used to satisfy FSAR commitments would be considered the same as a POT and subject to the guidance of RG 1.68. This item will be closely reviewed during routine NRC inspection of preoperational testing activities.

2.2.2 Findings

No violations were identified.

3.0 Preoperational Test Procedure Review and Verification

3.1 Scope

The POTs listed in Attachment A 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.

3.1.1 N2-POT-32, Low Pressure Core Spray (LPCS)

During review of this procedure the inspector noted that the procedural method of obtaining the first flow data point for vendor pump curve verification did not provide adequate instruction to ensure that unmeasured flow through the minimum flow valve, a parallel path, did not occur. This item was discussed with the test group supervisor who stated that the LPCS procedure section in question was being revised to take the initial flow point in a manner similar to N2-POT-33. The inspector had previously reviewed N2-POT-33 and found it acceptable. Other minor questions were also discussed and resolved.

3.1.2 Findings

No unacceptable conditions were identified.

4.0 QA/QC Interface With the Preoperational Test Program

4.1 Discussion

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

-- QASR-85-10074, QA Nuclear Surveillance of Training of Startup and Test Personnel, completed on May 24, 1985. The QA inspector reviewed the qualification of ten startup and test (SU&T) personnel against the requirements of Startup Administrative Procedure (SAP) 110 Revision 0. The QA inspector identified four personnel that had not completed the required Nine Mile Point 2 startup orientation/required reading list. The QA

inspector initiated an open item to be tracked under startup QA Program Surveillance Group Surveillance Report No. 85-10036 and discussed the item with the Test Group Manager. Corrective action was in progress and completed on June 7, 1985.

-- QASR-85-10131, Preliminary Testing of Limitorque Valve Operator for LPCS, completed on July 12, 1985. The QA inspector witnessed that testing of LPCS valve 2CS1*MOV112 was conducted in accordance with generic test procedure ED.GENE.014, Revision 1. It was also noted that deficiency report (DR) E30242 was issued by the test engineer to document missing limit switch cover plate bolts and DR M03531 was issued to document a broken barrel on the same switch.

-- QASR-85-10171, Surveillance of N2-POT-16, Makeup Water Storage and Transfer, completed on July 30, 1985. The QA inspector found testing was conducted in accordance with the procedure and applicable administrative controls.

-- QASR-85-10066, Surveillance of Flush Procedures for Compliance to ANSI Standards, completed May 31, 1985. The QA inspector determined that system flush velocities were not specified, measured or documented as required by the licensee's commitment to American National Standard (ANSI) N 45.2.8. The startup and Test Department (STD) response contested the QA inspectors finding. A review of several responses between QA and STD indicated that no agreement had been reached. On August 6, 1985, a memo, Hanson/Offlesbach, was sent to R. Matlack requesting upper management resolution. At the completion of this inspection on September 13, 1985, no decision had been made.

The inspectors discussed this item and decided that a detailed review (sampling) of completed licensee flush procedures would be required to determine adequacy of documentation and licensee ability to demonstrate adequate flow velocities during system flushing.

4.1.1 Findings

The above item concerning system flushing velocity is unresolved pending further review by the Senior Resident Inspector (410/85-30-01). Findings will be documented in a routine Senior Resident Inspector report.

5.0 Independent Verification

The inspector independently verified that the proposed FSAR Chapter 14 revision satisfied the guidance of RG 1.68 (Paragraph 2.1.1) and that preoperational test procedures reviewed satisfy regulatory guidance and licensee commitments. (Paragraph 3.1).

6.0 Plant Tours

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

6.1 Findings

No violations were identified.

7.0 Unresolved Item

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable, an item of noncomplicance or a deviation. The unresolved item identified during this inspection is discussed in Paragraph 4.1.1 of this report.

8.0 Exit Interview

A management meeting was held at the conclusion of the inspection on September 13, 1985, 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

PREOPERATIONAL TEST PROCEDURES REVIEWED

Procedure No.	Procedure Title	Rev. No.	Approval Date
N2-POT-33	High Pressure Core Spray	0	08/09/85
N2-POT-36	Standby Liquid Control	0	06/14/85
N2-POT-32	Low Pressure Core Spray	0	06/28/85
N2-POT-3	Condensate System	0	04/30/85
N2-POT-4	Condensate Storage and Transfer	0	02/26/85
N2-POT-5	Condensate Demineralizer and Resin Regeneration	0	06/14/85
N2-POT-8	Feedwater Heater and Extraction Steam	0	08/30/85
N2-POT-9	Condenser Air Removal	0	08/13/85
N2-POT-49-1	Hotwater and Glycol Heating System	0	04/12/85
N2-POT-49-2	Turbine Building Glycol Heating	0	02/01/85
N2-POT-55	Turbine Building Ventilation	0	02/01/85
N2-POT-59	Electric Tunnels Ventilation	0	03/05/85