U.S. NUCLEAR REGULATORY COMMISSION
Region I

Report No. 50-410/86-31

Docket No. 50-410

License No. CPPR-112 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: June 16-27, 1986

Inspectors: L. Briggs, Lead Reactor Engineer — 7/16/86 date

M. Evans, Reactor Engineer — 7/16/86 date

Approved By: P. Eselgroth, Chief, Test Programs Section, OB, DRS — 7/16/86 date

Inspection Summary: Inspection on June 16-27, 1986 (Report No. 50-410/86-31)

Areas Inspected: Routine, unannounced inspection by two region based inspectors of licensee action on previous inspection findings, preoperational and preliminary test witnessing, preoperational test results evaluation review, QA/QC interface with the preoperational test program, independent verification and plant tours and meetings.

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

\# G. Afflerbach, Startup Manager
*# S. Agarwal, Senior Licensing Engineer
\# C. Beckham, Quality Engineering Supervisor, Operations
* J. Bufis, Test Group Manager
S. Cook, Startup Special Projects Supervisor (SWEC)
*# J. Drake, Startup Special Projects Supervisor (SWEC)
*# P. Eddy, Site Representative, NY State PSC
L. Fenton, Audit Group Lead
G. Griffith, Site Licensing
\# W. Hansen, Manager, Nuclear QA Operations
E. Khalafalla, Senior Electrical Engineer (SWEC)
* A. Kovac, Audit Supervisor
*# T. Lee, Special Projects
R. Matlock, Deputy Project Director
\# J. McKenzie, Quality Surveillance
\# G. Pierce, QA Supervisor
T. Proios, Startup and Test Engineer
R. Rao, Project Engineer
\# M. Ray, Manager, Special Projects
L. Ringlespaugh, Test Coordinator
\# I. Weakley, Special Projects

Other NRC Personnel

* R. Brady, Reactor Engineer (Intern)
*# R. Gramm, Senior Resident Inspector, Construction

* Denotes those present at the interim exit meeting on June 20, 1986.

\# Denotes those present at the final exit on June 27, 1986.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (410/86-03-01) - Licensee to verify containment isolation valve listing of Preoperational Test (POT) 300, Loss of Offsite Power/ECCS. During review of POT-300, the inspector noted that valves listed on Data Sheet 5.2.2 and 5.3.2 did not agree with FSAR Table 6.2-56 and the Proof and Review Copy of Technical Specifications (TS). The licensee has since verified that TS and the FSAR Table are correct. POT-300 data sheets were also corrected. The inspector compared the corrected POT-300 data sheets, on a sampling basis, to the TS (latest copy) and FSAR Table 6.2-56 and found all documents in agreement.

(Open) Unresolved Item (410/86-27-01) - Licensee to include list of deficiencies, the status of the deficiencies, and the supporting closure documentation in all preoperational test packages. The inspectors reviewed four recently approved preoperational test result packages during this inspection (see paragraph 3.0). The licensee has included in the test summary for each test a matrix of deficiency reports (DRs) and problem reports (PRs) affecting the test. The columns of the matrix include: affected procedure steps, test exceptions and/or test summary notes written, description of the DR or PR, and status of the DR or PR at time of test results approval. The inspector noted a few minor errors in the documenting of the above data and discussed with the licensee the need to be more attentive in compiling the matrix. This item will remain open pending additional review of approved preoperational test results.

3.0 Preoperational Test Results Evaluation Review

3.1 Scope

The completed test procedures listed below were reviewed during this inspection to verify that adequate testing had been conducted to satisfy regulatory guidance, licensee commitments and FSAR requirements and to verify that uniform criteria were being applied for evaluation of completed test results in order to assure technical and administrative adequacy.

The inspector reviewed the test results and verified the licensee's evaluation of test results by review of test changes, test exceptions, test deficiencies, "As-Run" copy of the test procedure, acceptance criteria, performance verification, recording conduct of test, QC inspection records, restoration of system to normal after test, independent verification of critical steps or parameters, identification of personnel conducting and evaluating test data, and verification that the test results have been approved.

-- N2-POT-35, Reactor Core Isolation Cooling, Revision 1, Station Operations Review Committee (SORC) approved on June 12, 1986;

-- N2-POT-36, Standby Liquid Control System, Revision 1, SORC approved on May 30, 1986;

-- N2-POT-78, Remote Shutdown, Revision 1, SORC approved June 5, 1986;

-- N2-POT-11, Service Water, Revision 1, SORC approved May 30, 1986.

3.2 Findings

No violations were identified within the scope of this review.

4.0 Preoperational/Preliminary Test Witnessing

4.1 Scope

Testing witnessed by the inspectors included the observation of overall crew performance stated in Paragraph 7.0 of Inspection Report 50-410/86-15.

4.2 Discussion

-- ES.0300.001

During this inspection, the inspector reviewed Electrical Preliminary test ES.0300.001, Verification of Class 1E Busses Voltage Profile Computer Model, Revision 0. This preliminary test was being performed to verify the computer model used to calculate the voltage profile for the class 1E busses. Based on actual measurements obtained, the electrical distribution system will be remodeled to verify proper transformer tap setting and system design. The data will also be used to verify proper degraded grid voltage protective relay setting values. Data was primarily being gathered by use of the installed General Electric Transient Analysis Recording System (GETARS). This data was being supplemented by strip chart recorders.

The results of this test will be attached to POT-300 for Joint Test Group (JTG) review and approval of test results.

The inspector observed the establishment of base line loading conditions and the subsequent starting of large vital and non-vital loads. The inspector also discussed the results and the preliminary analysis of test data obtained during a previous portion of the test with senior electrical personnel present. Preliminary analysis, per licensee representatives, indicates that actual data very closely follows the original design computer model.

The inspector noted that the results of this test and POT-300 would be evaluated during a future routine inspection.

-- N2-POT-83, Primary Containment Isolation (PCIS)

The inspector witnessed a portion of the performance of Section 4.40.1, measurement of PCIS valve closing times. For all testing witnessed, the inspector noted that valve closing times were within the maximum limits. Testing was being conducted in accordance with the attributes of Paragraph 7.0 of Inspection Report 50-410/86-15. The inspector observed continuous QA coverage during this testing.

4.3 Findings

No unacceptable conditions were identified.

5.0 QA/QC Interface with the Preoperational Test Program

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

-- QASR 86-10427, Test Results Review of N2-POT-11, Service Water System, review completed May 30, 1986. The QA inspector used QA checklist SQA-S-145-86, Revision 1, to check various attributes of the completed procedure. All QA comments were resolved.

-- QASR 86-10469, surveillance of operator fuel handling training conducted June 3, 1986. The QA inspector observed training involving operation of the refuel bridge. A dummy fuel assembly was removed from the reactor vessel, transported through the fuel transfer canal to the spent fuel racks and inserted into a rack. The QA inspector noted that no problems were encountered during the fuel transfer.

-- QASR 86-10476, QA review, conducted on June 5, 1986, of Deficiency Report (DR) #19989 written to install a new K39 Relay at Division III Emergency Diesel Generator Protection Panel #2EGS*PNL028. The QA inspector noted that the DR had been issued as "QA Category II" instead of "QA Category I" and that Quality Control (QC) had not assigned inspection requirements based on the Category II identification. The QA inspector verified that the identification on the DR was changed to "QA Category I" and that QC inspection requirements were completed per QC Inspection Report (QCIR) #86-2370.

-- QASR 86-10519, surveillance of completed preoperational tests (POTs), conducted June 13, 1986. The QA inspector reviewed eleven POTs to verify that no changes had been made to the test procedures after Joint Test Group (JTG) approval, as required by Startup Administrative Procedure (SAP) N2-SAP-106C, Conduct of Testing. The QA inspector noted that various changes had been made to seven of the POTs and that one had not been approved by QA prior to JTG approval (as required by N2-SAP-106C). The QA inspector notified Startup and Test of the surveillance findings. The licensee's QA department will keep this QASR open pending a decision on the corrective action needed. The resolution of the QASR will be reviewed in a subsequent NRC inspection.

In addition to the above, the inspector discussed with the licensee QASR No. SR-86-10455 which was initially reviewed during Inspection 50-410/86-30. The QASR identified the changing of a flush sample point in the DBA (H_2) Recombiner System. The location of the original sample point specified in the procedure was inside the Wetwell (inaccessible). The new sample point (penetration Z57A) was to be the first accessible drain or vent valve outside the containment.

During this inspection, the inspector accompanied by the senior resident inspector, observed the location of the new sample point. The new point was approximately two (2) feet outside the containment (wetwell) wall. The inspectors concluded that in this case, since only a few feet of pipe were not sampled, that procedural intent was satisfied. The inspector also reviewed the SUT managers response to the QASR and QA/QC acceptance of that response.

5.1 Findings

No violations were identified within the scope of the above review.

6.0 Independent Verification

During review of N2-POT-35 (RCIC), the inspector independently and randomly selected several valves and compared the actual stroke times to those stated on Drawing No. 12177-PID-35A and 35B. Valve stroke times sampled were acceptable.

7.0 Plant Tours and Meetings

7.1 Tours

During several tours, the inspector observed Niagara Mohawk personnel removing, cleaning and inspecting several cylinder heads from Emergency Diesel Generator (EDG) No. 1 and 3. Two cylinder heads on EDG No. 1 had previously had their air start valve seals reworked by Cooper-Bessemer because the seats were becoming loose and interfering with the start sequence of the engine. All cylinder heads for EDG No. 1 (DR 19048) and EDG No. 3 (DR 19978) were being removed and inspected to identify any similar deficiencies.

Work was being performed under Work Request (WR) No. 12846 (EDG-1) and No. 12847 (EDG-3). Quality Control Inspection was being conducted under QCIR 2-86-2577 (EDG-1) and 2-86-2578 (EDG-3). The inspector noted that all parts from a particular cylinder head were being stored in a box identified for that particular cylinder. The inspector also noted that all openings were properly sealed immediately after head removal.

The licensee conducted a visual inspection of the cylinder heads following removal. Also, the Startup and Test Department performed mechanical pull tests on each air start valve seat to verify physical integrity. All inspection and test results were found to be satisfactory. On June 25, 1986, the licensee began reassembly of the cylinder heads.

7.2 Meetings

The inspector randomly attended the licensee's morning Startup Plan of the Day meeting during which the current status of preoperational testing activities and any holds or delays are discussed. Other items such as surveillance and outage activities are also discussed.

7.3 Findings

No unacceptable conditions were observed.

8.0 Exit Interview

A management meeting was held at the conclusion of the inspection on June 27, 1986 to discuss the inspection scope, findings and observations as detailed in this report. An interim exit meeting was also held on June 20, 1986 to discuss preliminary inspection findings (see Paragraph 1 for attendees at both meetings). 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.