U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. <u>50-311/78-32</u>				
Docket No. <u>50-311</u>				
License No.	CPPR-53	Priority	Category B1	
Licensee: Public Service Electric and Gas Company				
80 Park Place				
	Newark, New Jersey	y 07101		
Facility Name:				
Inspection at: Hancocks Bridge, New Jersey				
Inspection conducted: September 13-15, 1978				
Inspectors:	H. Michola 9/25/78			8
	H. Nicholas, Rea	ctor Inspector	/date/sign	ied
			date sign	ied
Approved by:	Wiggun D. L. Capiton, C	<u>For</u> hief Nuclear Support	date sign <u>9/25/78</u> date sign	ied
	Section No. 1,	RO&NS Branch		

Inspection Summary:

Inspection on Septebmer 13-15, 1978 (Report No. 50-311/78-32)

<u>Areas Inspected</u>: Routine unannounced inspection by a regional based inspector of the overall preoperational test program; the integrated hot functional test program status; preoperational test procedures for review, verification and witnessing; followup on previous unresolved and open items; and plant tour of the control room, auxiliary building, turbine building and containment. The inspection involved 26 inspector-hours on site by one NRC regional based inspector. <u>Results</u>: No items of noncompliance were identified.

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Region I Form 12 (Rev. April 77)

DETAILS

1. Persons Contacted

*Mr. E. Barradale, Project Construction Manager *Mr. R. Burricelli, Asst. Project Manager *Mr. S. Chawaga, Principal Staff Engineer QAD *Mr. Y. Contractor, Site QA Engineer Mr. J. Cox, Senior Construction Engineer Mr. S. Gerstein, Startup Support Engineer *Mr. R. Griffith Sr., Senior Staff Engineer QA *Mr. C. Johnson, Startup Engineer *Mr. H. Lowe, Site QA Engineer *Mr. D. McLaughlin, Senior Construction Engineer *Mr. A. Meyer, Site QA Engineer *Mr. G. Owen, Principal Construction Engineer *Mr. R. Stanley, Lead Mechanical Field Engineer *Mr. P. String, QA/AC Coordinator Mr. D. Tauber, Site QA Engineer Mr. G. Traylor, Startup Engineer Mr. R. Weltman, Startup Engineer United Engineers and Constructors, Inc.

*Mr. F. Albert, Asst. Lead Engineer Mr. N. Bender, Lead Test Engineer *Mr. R. Phelps, Supt. Field QC

USNRC

*Mr. W. Bateman, Reactor Inspector
*Mr. J. Durr, Reactor Inspector
*Mr. L. Norrholm Resident Reactor Inspector
*Mr. R. Paolino, Reactor Inspector
*Mr. A. Toth, Reactor Inspector

*denotes those present at the exit interview.

2. Preoperational Test Program

a. Preoperational Test Procedure Review

The following procedures were reviewed for technical and administrative adequacy.

-- SUP 25B Rev. 0 Approved August 29, 1978. Vital Heat Trace



- -- SUP 31.1B Rev. O Approved August 29, 1978. Emergency Power Operational Test -2B Diesel Controls-Alarms-Auxiliaries
- -- SUP 31.1C Rev. O Approved August 28, 1978. Emergency Power Operational Test -2C Diesel Controls-Alarms-Auxiliaries
- -- SUP 31.2A Rev. O Approved August 28, 1978. Emergency Power Operational Test -Initial 2A Diesel Generator Operational Testing
- -- SUP 45 Rev. 0 Approved August 30, 1978. Atmospheric Steam Dump Control
- SUP 46 Rev. 0 Approved August 30, 1978.
 Condenser Steam Dump System-Cold
- -- DTP-30-LRT-1 Rev. 0 Approved July 13, 1978. Reactor Containment Type B Leakage Rate Test
- -- DTP-30-LRT-2 Rev. 0 Approved August 4, 1978. Reactor Containment Type C Leakage Rate Test

Each procedure was reviewed for the following:

- -- Management approval.
- -- Appropriate committee review,
- -- Procedure format,
- -- Test objectives,
- -- Pertinent Prerequisites,
- -- Environmental conditions,
- -- Acceptance criteria,
- -- References,
- -- Initial conditions,
- -- Test objectives are met,
- -- Performance verification,
- -- Recording conduct of test,
- -- Restoration of system to normal after test,
- -- Evaluation of test data, and,
- -- Quality control verification

Findings:

The inspector ascertained by review of the above procedures that they are consistent with regulatory requirements, guidance and licensee commitments. No discrepancies were noted in the review of these procedures. b. Preoperational Test Procedure Verification

The following procedures were reviewed to verify that adequate testing is planned to satisfy regulatory guidance and licensee commitments:

- SUP 6B Rev. 0 Approved February 17, 1977 Compressed Air System
- -- SUP 25B Rev. 0 Approved August 28, 1978 Vital Heat Trace
- -- SUP 31.1B Rev. O Approved August 29, 1978 Emergency Power Operational Test -2B Diesel Controls - Alarms - Auxiliaries
- -- SUP 31.1C Rev. O Approved August 28, 1978 Emergency Power Operational Test -2C Diesel Controls - Alarms - Auxiliaries
- -- SUP 31.2A Rev. O Approved August 28, 1978 Emergency Power Operational Test -Initial 2A Diesel Generator Operational Testing.
- -- SUP 45 Rev. 0 Approved August 30, 1978 Atmospheric Steam Dump Control
- -- SUP 46 Rev. 0 Approved August 30, 1978 Condenser Steam Dump System - Cold

The inspector verified that the licensee had a procedure written, reviewed, and approved. Management approval was in accordance with established licensee procedures and test objectives were consistent with test titles.

Findings:

No discrepancies were noted in the review of these procedures and the inspector had no further questions at this time.

c. Preoperational Test Results Evalvation

The following procedures were reviewed to ascertain whether uniform criteria are being applied for evaluating completed preoperational tests to assure their technical and administrative adequacy:

- -- SUP 6B Rev. 0 Approved June 20, 1978 Compressed Air System
- -- SUP 10.1 Rev. 0 Approved June 27, 1978 VCT Level and Makeup Control

- SUP 12 Rev. 0 Approved August 17, 1978 - -Residual Heat Removal System - Cold SUP 15.1 Rev. 0 Approved Sept. 6, 1978 _ _ Safety Injection Sytem - Performance Test SUP 27.1A Rev. 0 Approved June 20, 1978 2A 28 VDC System SUP 27.2A Rev. O Approved July 11, 1978 ----2a 125 VDC System SUP 27.2B Rev. 0 Approved July 11, 1978 _ _ 2B 125 VDC System SUP 27.2D Rev. O Approved March 27, 1978 ------2A & 2B 125 VDC System (Interim)
- -- SUP 27.3 Rev. 0 Approved July 11, 1978 No. 2 250 VDC System
- -- SUP 29 Rev. 0 Approved July 11, 1978 Energizing 4KV Group & Vital Buses
- -- SUP 33 Rev. 0 Approved August 15, 1978 Condenser Air Removal
- -- SUP 40 Rev. 0 Approved July 25, 1978 Turbine Lubricating Oil System

The inspector reviewed the test results, and verification of licensee evaluation of test results, by the following methods:

- -- Review of all test changes,
- -- Review of all test deficiencies,
- -- Review of test summary and evaluation,
- -- Review of "As-run" copy of test procedure,
- -- Review of QA inspection records, and,
- -- Verifying that the test results have been approved.

Findings

No discrepancies were noted in the review of these procedures and the inspector had no further questions at this time.

- 3. Integrated Hot Functional Test Program
 - a. HFT Status

The major thrust of this inspection centered on preparations for the Integrated Hot Functional Test. The inspector discussed the following areas with the Startup Engineer and his staff:

- Preparations for the integrated Hot Functional Test, ----
- Procedure status and approval, and, - -
- Prerequisites and references needed for HFT, such as: -----
 - (1)Operating Instructions, (OI),

 - (2) Startup Procedures (SUP),(3) Post Preoperational Testing Turnover (POTT), and,
 - (4) Cold hanger settings and hanger pins.

b. ' HFT Procedure Review

The inspector reviewed the following draft copies of procedures in support of Hot Functional Testing:

- SUP 50.12 Component Cooling System Hot - -
- SUP 50.14 Auxiliary Feed System Performance Test - -
- ----SUP 50.16 Safety Injection System - Precritical Test

Findings

It was noted by the inspector that this was a preliminary review of the draft copies of these procedures, and that a detailed review will be made of the approved procedures on subsequent inspections. The inspector had not further questions at this time.

4. Plant Tour

The inspector observed work activities in the Control Room the Turbine Building, the Auxiliary Building, and in Containment. In the Control Room the inspector interviewed control room operators and observed instrumentation and control panels. The inspector also observed preparations being made for Integrated Hot Functional Testing. No inadequacies were identified.

5. Exit Interview

At the conclusion of the site inspection on September 15, 1978, an exit meeting was conducted with the licensees senior site representatives (denoted in paragraph 1). The findings were identified and unresolved items were discussed.