U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report No. 50-388/83-28

Docket No. 50-388

License No. CPPR-102

Priority -

Category B

Licensee: Pennsylvani: Power and Light Company 2 North Ninth Street Allentown, Pennsylvania 18101

Facility Name: Susquehanna Steam Electric Station, Unit 2

Inspection At: Salem Township, Pennsylvania

Inspection Conducted: November 29-December 30, 1983 Inspectors: AR

Lead Reactor Engineer Reactor Engineer

Sellars

Approved by:

date

L. H. Bettenhausen, Chief,

Test Programs Section

Inspection Summary: Inspection on November 29-December 30, 1983 (Report No. 50-388/83-28)

Areas Inspected: Routine unannounced inspection of pre-operational test program including test program implementation, test procedure review and verification, test results evaluation, test witnessing; Unit 1 - Unit 2 intertie outage, pre-fuel load snubber inspection program, fuel receipt, inspection and storage accountability; QA-QC outage interfaces; start-up test program; followup of open items; and, tours of the facility. The inspector involved 195 hours on site by two NRC region-based inspectors.

Results: No items on noncompliance were identified.

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DETAILS

1. Persons Contacted

Pennsylvania Power and Light Company

R. Beckerly, General Supervisor, QC J. Blakeslee, Jr. Supervisor of Operations, Unit 2 S. R. Byram, Technical Supervisor S. Denson, Assistant Manager, NQA Operations T. Dalpiaz, Assistant ISG Supervisor E. Gorsky, CC Supervisor J. Graham, Senior Compliance Engineer *C. Jaffee, ISG Staff Assistant *J. Justick, Engineer *A. Iorfida, Assistant ISG Supervisor H. Keiser, Plant Superintendent D. Lauer, ISG Coordinator R. Lombard, Power Production Engineer, Nuclear *C. Myers, Assistant Plant Superintendent - Outages M. Parker, Coordinator Engineering NQA *R. Prego, QA Supervisor Operations R. Sheranko, S&T Group Supervisor C. Smith, Nuclear Engineer J. Todd, Compliance Engineer D. Thompson, Assistant Plant Superintendent R. Wehry, Lead Startup Test Engineer J. Zentz, RCC Supervisor Bechtel Power Corporation E. igard, ISG Supervisor General Electric Corporation T. Czubakowski, Lead Startup Test Engineer

K. Mertes, Operations Manager

U. S. Nuclear Regulatory Commission

- P. Eapen, Lead Reactor Engineer
- L. Narrow, Lead Reactor Engineer
- *L. Plisco, Resident Inspector
- G. Rhoads, Senior Resident Inspector
- T. Shaub, Reactor Engineer

*Denotes those present at exit interview on December 29, 1983

2. Licensee Action On Previous Inspection Findings

(Closed) Inspector Followup Item (388/82-14-02) Operations staff remain sufficient to cope with requirements of preoperational test program.

The inspector examined the staffing plan for 2 unit operation which calls for:

1 Shift Supervisor 2 Unit Supervisors (US) 2 Assistant Unit Supervisors (AUS) 4 Plant Control Operators (PCO) 5 Nuclear Plant Operators (NPO - 1 shared)) 3 Auxiliary System Operators (ASO - 1 shared)

By review of documentation and discussions with plant staff personnel, the inspector established that the licensee has 6 SRO's, 10 US's, 10 AUS's and plans to update by qualifying 4 more SRO's and upgrading 5 PCO's to AUS's in early 1984. The qualified staff is now adequate to meet the staffing plan for 2 unit operation. This item is closed.

(Closed) Inspector Followup Item (388/83-01-02) FSAR change is approved prior to fuel load regarding Preoperational Test Procedure P217.1A, Instrument AC.

The inspector reviewed the letter from N. Curtis, PPL, to A. Schwencer, NRC, dated October 10, 1983 with subject matter including preoperational and acceptance test abstracts. These changes will be incorporated in the next revision of the FSAR. The changes adequately address the concerns of the inspector as to the deletion of the full load testing of the distribution panels. The inspector had no further questions. This item is closed.

(Closed) Unresolved Items (83-16-01), (83-18-01), (83-18-02) and (83-23-01). These unresolved items concern exceptions to completed preoperational and acceptance tests, many of which have been resolved. The remaining exceptions that remain unresolved as of this inspection will be incorporated and tracked as Unresolved Item 83-28-01 and Unresolved Item 83-28-02, as follows:

(Open) Unresolved Item (388/83-28-01)

Procedure	Title	Exceptions					
A215.1A	TBCCW	001					
A242.1A	Circ Water	001, 002					
A218.1A	INST Air	001					
A219.1A	Gen Serv Air	001, 002					
A232.2B	South Gate	005					
A263.1B	Bypass Ind Sys	001, 003, 004, 005					
A211.1A	Serv Water	001, 003					
A243.1A	Cond Air Removal	001					
A243.2A	Cond Tube Cleaning	002					
A237.1A	MTS Cond Refuel Water	001					
A293.1A	Turbine LO	003, 004					
A244.1A	Condensate	001					
A235.1A	Fuel Pool Cool	001, 002					
A241.1B	Cool Tower	001, 002					
A288.2A	Non-Ess 250 VDC	002, 003, 004, 005					

A292.1A A299.4A	Rad Doors	001, 002, 004, 005, 006, 007
(Open) Unresolved	Item (399/83-28-02)	
Procedure	Title	Exceptions
A279.8A P213.4A P260.1A P279.4A	Cont ACC Range Mon Halon 1301 Cont Atmos Circ Perms Refuel Flr VT Exb Rad Mon	001 001, 003 004, 006
P251.1A P256.1A P216.1A P234.3A P234.1A	Core Spray RMCS RHR SW RB Elec Equip RB HV	001 003, 004, 006 002 001, 002 002 002 002, 003
P278.2A P279.2A P288.1A P299.1A P279.3A P250.1A	IRM Perms MS Line ESS 250 VDC RB Cranes Perms Liq Proc RCIC	001, 004, 005 001 004 001, 002 001 001, 003, 004, 005, 002, 003
P251.2A F261.1A	Core Spray Patt RWCU-Demin	001, 003, 004, 005 002, 003

3.0 Preoperational Test Program

References

 551	22	Fi	nal	Saf	otv	Anal	VIC	c	Ro	no	10+
201			IIGI	201	cuy	nila	33	3	1/G	PU	1.0

- -- SSES Safety Evaluation Report and Supplements 1, 2, 3, 4 and 5
- -- SSES Startup Administrative Manual
- -- Startup Technical Manual
- -- SSES Project Schedules
- -- SSES Preoperational and Acceptance Test Matrix
- -- SSES Major Milestone Schedule
- -- SSES Unit 1 and Unit 2 Intertie Schedule
- -- RG 1.68, Initial Test Program for Water Cooled Nuclear Power Plants

3.1 Test Program Implementation

Scope

The inspector held discussions with the Unit 1-Unit 2 intertie outage director, the ISG supervisor and members of his staff concerning the Unit 1-Unit 2 intertie outage; system turnover status; preoperational test program status; outage schedules and milestones; remaining tests to be conducted, procedures to be issued for review and test results to be evaluated and approved; QA and QC interface and involvement with intertie outage testing; and, preparations being made for the Cold Functional Test, P200.1B.

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Findings

In the above discussions, the inspector expressed his concerns in each of the areas discussed. Through discussions with the licensee's representatives, review of documents and references, and witnessing of tests, the inspector concluded that the licensee has an adequate Unit 1-Unit 2 Intertie Outage and test program in place, and is being adequately implemented. No unacceptable conditions were noted. The inspector had no further questions at this time.

3.2 Test Procedure Review and Verification

Scope

The 19 procedures listed in Attachment A were reviewed for technical and administrative adequacy and for verification that adequate testing is planned to satisfy regulatory guidance and licensee commitments. The procedures were examined for management review and approval, procedure format, clearly stated test objectives, prerequisites, environmental conditions, acceptance criteria, source of acceptance criteria, references, initial conditions, test objectives met, performance documentation and verification, detailed instructions for performance of test restoration of system to normal after test, identification of personnel conducting test and evaluating test data, independent verification of critical steps or parameters such as quality control witness or hold points, and quality assurance and quality control interface and involvement.

Findings

As a result of the review of these test procedures, the inspector ascertained that the procedures are consistent with regulatory requirements, guidance and licensee commitments. No discrepancies or unacceptable conditions were identified. The inspector had no further questions on these procedures.

3.3 Test Results Evaluation

Scope

The 16 completed test procedures listed in Attachment B were reviewed to verify that adequate testing was planned in order to satisfy regulatory guidance and licensee commitments and to ascertain whether uniform criteria were being applied for evaluating completed preoperational tests in order to assure their 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 test procedures, acceptance criteria, performance verification, recording conduct of tests, QC inspection records, restoration of systems to normal after tests, independent verification of critical steps or parameters, identification of personnel conducting and evaluating test data, and verification that the test results have been approved.

Findings

No discrepancies or unacceptable conditions were noted in the review of these procedures. The following unresolved test exceptions were noted:

Procedure	Title	Exceptions
P255.1A	CRD HS	001, 002, 003, 005, 006, 007
P264.1A	RX Recirc	001, 002, 003
P279.5A	Off Gas-Pretreat	001
P252.1A	HPCI	001, 002, 003, 004, 007, 007, 008
P278.1A	SRM	001, 005
P249.1A	RHR	002, 003, 004, 005, 007, 008, 009 010, 011, 013
P280.1A	RX Non-Nuc Inst	004
P273.2A	Cont H ² Recon B	001
A297.1A	Stator Cool	005
A299.2B	Common Sys	001, 002, 003, 004
A285.2B	Freeze Prot	001
A274.1B	N ² Stor & Supply	001

These 12 test procedures will be examined on subsequent inspections for resolution of the listed exceptions and approval of the resolution by the licensee. This is an Unresolved Item (388/83-28-03).

3.4 Test Witnessing

3.4.1 Core Spray System Test

Scope

The inspector reviewed the test procedure P251.1B, Revision O, Core Spray System Unit 1 - Unit 2 Interlock, and witnessed portions of the test. The objective of this test is to demonstrate the operability of the Unit 1 to Unit 2 and Unit 2 to Unit 1 interlocks.

Findings

The inspector witnessed portions of the test, covering Unit 1 preferred pump logic test and Unit 2 preferred pump logic test. No unacceptable conditions were identified.

3.4.2 Turbine Valves and Supervisory Systems Tests

Scope

The inspector reviewed the test procedure A293.2A, Revision O, Turbine Valves, Valve Test, EHC, and Supervisory Systems, and witnessed portions of the test. The general objective of this test is to demonstrate proper operation of the turbine electro hydrualic control (EHC) and supervisory system. The specific objectives of this test are to demonstrate the EHC

hydraulic system operates per design, the EHC operates to control the turbine per design and the turbine valves and valve test circuits operate per design.

Findings

The inspector witnessed portions of the test such as the hydraulic system operation, trip circuit operation and valve operation. The inspector also interviewed the test engineer concerning segments of the test. No unacceptable conditions were identified.

3.4.3 Emergency Service Water System Test

Scope

The inspector reviewed the test procedure P254.1B, Revision O, Emergency Service Water System, and witnessed portions of the test. The general objective of this test is to demonstrate proper operation of the emergency service water system. The specific objectives are to demonstrate the ability to start the ESW pumps from the control room or a remote location and the ability to operate the spray pond valves from a remote location.

Findings

The inspector discussed the test with the test engineer and witnessed portions of the test including the ability to start the ESW pumps from the control room and the ESW pumps and spray pond valves from a remote location. No unacceptable conditions were identified.

3.4.4 Feed Water System Test

Scope

The inspector reviewed the test procedure, P245.1A, Revision O, Feed Water System, and witnessed portions of the test. The general objective of this test is to demonstrate proper operation of the feedwater system. The specific objectives are to demonstrate that system controls function in accordance with design intent and interlocks with the main turbine and feed pumps function correctly.

Findings

The inspector witnessed portions of the test such as system controls and main turbine and feed pump interlocks. No unacceptable conditions were noted.

3.4.5 Feed Water Control Test

Scope

The inspector reviewed the test procedure P245.2A Revision O, Feed Water Control and witnessed portions of the test. The general objective of this test is to demonstrate proper operation of the feed water control system, to demonstrate interlocks with the main turbine, recirculation system and feed pumps function correctly, feed water control signals to the startup regulating valve and feed pumps function correctly with simulated inputs and stop commands originating from their respective control stations, all feed water control alarm/trip set points have been set correctly, and, all recorders, indicators, and annunciators function correctly.

Findings

The inspector discussed the test with the cognizant test engineer and witnessed portions of the test such as interlocks, control signals, simulated inputs, alarms, trip set points, and functioning of recorders indicators and annunciators. No unacceptable conditions were noted.

3.4.6 Residual Heat Removal Test

Scope

The inspector reviewed the test procedure P249.1B, Revision O, Residual Heat Removal System, and witnessed portions of the test. The objectives of this test is to demonstrate the operability of the Unit 1 to Unit 2 RHR pump interlocks.

Findings

The inspector witnessed portions of the test including the operability of the Unit 1 to Unit 2 pump interlocks. No unacceptable conditions were noted.

3.4.7 Remote Shutdown Panel Test

Scope

The inspector reviewed the test procedure TP 4.17, Revision O, Remote Shutdown Panel Functional Test, and witnessed portions of the test. The objective is to provide a functional test of the remote shutdown panel 2C201. This test encompasses primary containment instrument gas, residual heat removal, reactor core isolation cooling, bypass indication, reactor recirculation and main steam systems.

Findings

The inspector witnessed portions of the test including observations in the control room as well as in the Remote Shutdown Panel Room. The inspector also discussed the test with the test engineer. No unacceptable conditions were noted.

3.4.8 Diesel Generator Monthly Test

Scope

The inspector reviewed the test procedure 50-24-001, Revision 3, Diesel Generator Monthly Operability Test, and witnessed portions of the test.

The test demonstrates the operability and one hour full load run capability of each diesel generator at least monthly on a staggered test basis while the plant is in any operable condition. In addition, this test verifies fuel levels in the diesel storage and day tanks, fuel transfer pump operability, pressure in air start receivers and diesel generator alignment for standby power.

Findings

The inspector witnessed portions of this test on the "D" diesel generator set including observations from the control room as well as from the diesel generator room. The inspector discussed maintenance and surveillance of the diesel generators with maintenance personnel and with plant staff personnel.

No discrepancies were noted and no unacceptable conditions were identified.

4. Startup Test Program

References

- -- SSES Final Safety Analysis Report
- -- SSES Safety Evaluation Report and Supplements 1, 2, 3, 4, & 5
- -- Regulatory Guide 1.68, Initial Test Program for Water-Cooled Reactor Power Plants

4.1 Overall Startup Test Program

Scope

The inspector held discussions with the Startup Test Group Supervisor and members of his staff to assure that copies of procedures for startup tests had been provided to the NRC.

Findings

The applicant has provided to the NRC copies of the startup test procedures in accordance with the Startup Test Program as described in PP&L letter to the NRC N. Curtis to A. Schwencer, "Startup Test Program" 1870 dated October 13, 1983. The copies of procedures issued to the NRC are the latest revisions in accordance with the PP&L Startup Test Procedure Startup Log. The procedures provided to the NRC have received Test Review Committee (TRC) approval and approval of the Technical Supervisor but have not yet been recommended for approval by the Plant Operations Review Committee (PORC). A copy of AD-TY-460 Startup Test Administrative Procedure REV 5A (not yet issued) was provided to the inspector for information. No unacceptable items were identified. The inspector had no further questions at this time.

4.2 Initial Fuel Loading Procedure

Scope

Discussions with the Startup Test Group Supervisor, Power Production Engineer-Nuclear, GE Operations Manager and his staff were held in the course of review of startup test procedures designated as ST-3.0, ST-3.1, ST-3.3, and ST-3.4 in Attachment C. Discussions also utilized GE Startup Data Book 462HA171 and GE Startup Test Specification 22A6950, and Fuel and Core Component Transfer Authorization Sheet (FACCTAS). Technical and administrative adequacy and verification that testing is planned to satisfy regulatory guidance and licensee commitments was assessed The procedures were reviewed for management approval, committee review, procedure format, test objectives clearly stated, prerequisites, acceptance criteria, source of acceptance criteria, initial test conditions, references, test instructions, test objectives are being met, identification of personnel conducting the test evaluation of test data, observed test deficiencies. their resolution and retest, and for fuel load procedures, fuel loading increments, signal to noise ratio, visual check of each assembly incore position, and shutdown margin determination.

Findings

The licensee's representative identified that due to experience obtained from the Unit 1 Startup, the Startup test procedures are different for Unit 2. More reliance is being placed on the normal plant operating procedures prior to and during the conduct of a startup test. A specific example is technical specification compliance. During Unit 1 startup each technical specification applicable was a specific check-off prerequisite in the startup test procedure. In the case of Unit 2, the responsibility for technical specification compliance rests with the appropriate supervisor and his signature that the appropriate technical specifications are satisfied and current.

As a result of review of the test procedures, references, and answers to questions asked by the inspector, the inspector ascertained that the procedures are consistent with regulatory requirements, guidance and license commitments.

In the course of reviewing the procedures contained in ST-3 the inspector identified several procedures (RE-281-103, OP-237-001, SI-278-216, SI-278-217 and SI-278-218) that have not been issued, but are required to conduct ST-3. The licensees representative indicated that they are in the process of assuring that all procedures and references contained in each ST procedure are correct and current and that the procedures would be released prior to the conduct of the ST-3 test. This is an Inspector Followup Item (388/83-28-05). This item will be reviewed during a subsequent inspection.

4.3 Heat Up Phase Procedure Review

The inspector held discussions with the Startup Test Group Supervisor and GE Operations Manager and a member of his staff to review the startup

testing procedures relating to control rod drive system and the MSIV testing. The procedures designated ST-5.0, ST-5.1, ST-5.2, ST-5.3, ST-5.4, ST-5.5, ST-5.6, ST-5.7, ST-5.8, ST-25.0, ST-25.1, ST-25.2, ST-25.3 in Attachment C were reviewed for technical and administrative adequacy and to verify that the testing commitments have been met. The procedures were reviewed for management approval, committee review, procedure format, test objectives clearly stated, prerequisites, acceptance criteria, source of acceptance criteria, initial test conditions, references, test instructions, test objectives as being met, identification of personnel conducting the test, evaluation of test data, observed deficiencies, their resolution and retest. Included in the discussions and reviews was the GE startup Test specification 22A6950.

Findings

The following items were discussed with the licensee's representative; the licensee's representative agreed to take the indicated action. Based on the review and discussions, and with the agreed upon actions being taken, the inspector ascertained that the procedures are consistent with regulatory requirements, guidance and license commitments.

- Procedure ST-5.8 requires data to be recorded in accordance with Appendix A. Appendix A has been deleted from the procedure. The procedure will be revised to indicate the proper place to record the data.
- (2) Procedure ST-25.0 did not completely address the source for acceptance criteria for main steam isolation valve (MSIV) closure time, including delay, not being greater than 5.5 seconds. The licensees representative agreed to list both Technical Specification Limiting Condition for Operation 3.4.7 and Technical Specification Table 3.3-2.3 as the source for this acceptance criteria.
- (3) Procedure ST-25.3 indicates that the acceptance criteria for closure time for any MSIV including delay not being greater than 5.5 seconds will be verified by this test. The licensee's representative was not able to demonstrate that this test will provide such verification. The licensee's representative agreed to investigate whether the data provided by this test is sufficient to make the verification or, if it is not sufficient, to revise the procedure and confirm that the testing done under procedure ST-25.1 is sufficient to verify the acceptance criteria.

These are considered open items and will all be included under one Inspector Followup Item (388/83-28-06). These items will be reviewed during subsequent inspections.

5. Pipe Support and Restraint Systems

References

-- AD-TY-195 Revision 2, dated February 19, 1983 Prefuel Load Snubber Inspection Program

- -- SSES Final Safety Analysis Report
- -- ASME Code Section III, Division 1 Subsection NF Component Supports
- -- SSES Proposed Technical Specifications
- -- IE Bulletin 81-01, Surveillance of Mechanical Snubbers
- -- Quality Control Inspection Reports
- -- Quality Control Inspection Checklists

Scope

The inspector held discussions with the licensee's representatives to ascertain whether testing of pipe support and restraint system is consistent with regulatory requirements, proposed technical specification and applicable codes.

Inspection of the pipe support and restraint program was accomplished by (1) review of documentation, (2) discussions with licensee personnel, (3) walkdown of selected systems, (4) witnessing of work in progress, (5) witnessing of snubber stroking, and (6) walkdown of piping examining snubbers, spring hangers, whip restraints, fixed supports, rigid hangers and anchor plates, and support structures.

Included in the inspection of mechanical snubbers, was a review of the following quality control inspection check lists.

 QCIR 83-6761, inspected November 30, 1983, results approved December 1, 1983

DLA-204-H7, DLA-203-H3

(2) QCIR 83-6763, inspected November 30, 1983 results approved December 1, 1983

DCA-206-H4, DCA-206-H2, DCA-203-H2, DCA-203-H5, DCA-203-H6, DCA-203-H6

(3) QCIR 83-6367, inspected November 12, 1983 results approved November 15, 1983

RWS-200-H9, RWS-200-H10, DBA-08-H1, DBA-208-H2, DBA-208-H3

(4) QCIR 83-6762, inspected November 30, 1983 results approved December 1, 1983

RWS-200-H16

(5) QCIR 83-6764, inspected October 18, 1983 results approved December 1, 1983

HBB-218-H6, GBB-206-H51, HBB-218-H6, GBC-217-H16, HCB-203-H55, HBB-204-H6, HCB-203-H54, GBB-204-H28, GBB-204-H34

(6) QCIR 83-6774, inspected November 28, 1983 results approved December 2, 1983

MST-222-H15, MST-222-H26, MST-222-H19, MST-222-H27, MST-222-H24

(7) QCIR 60-6780, inspected December 1, 1983 results approved December 2, 1983

HBD-203-H9, GBB-206-H55, HBD-201-H16, JRD-228-H56, HBB-210-H3

(8) QCIR 83-6772, inspected November 22, 1983 results approved December 2, 1983

MST-222-H31, MST-222-H12, MST-222-H39, MST-222-H36, MST-222-H13

Findings

As a result of discussions with licensee representatives; review of referenced documents; walkdown of selected systems; witnessing of disassembly, cleaning, inspecting, stroking, and reassembly of snubbers; and examination of selected snubbers, spring hangers, and whip restraints, no discrepancies were noted, and no unacceptable conditions were identified.

6. Fuel Receipt, Inspection, Storage and Accountability

References

References are listed in Inspection Reports 50-388/83-16 and 83-18.

Scope

A total of 764 nuclear fuel bundles for initial fuel loading of Unit 2 reactor core are on site and have been examined, cleaned, inspected, assembled and stored for eventual loading into the core. Of the total number of fuel bundles, 47 had nonconformance reports (NCR's) written against them. The 47 fuel bundles have been dispositioned by repair and/ or replacement of parts.

The inspector examined a sampling of the completed documentation for nuclear fuel receipt, inspection and storage of the 764 nuclear fuel bundles. Documentation of Shipments 5, 12, 18, 20, 25, and 28 as listed below was examined.

- (1) GE Domestic Memo of Shipment
- (2) GE Nuclear Fuel Manufacturing Bundle Shipping Document

- (3) GE Bill of Lading
- (4) GE Memorandum for Bill of Loading
- (5) GE Radioactive Materials Packaging and Shipping Record
- (6) PPL Receipt Inspection Report
- (7) GE Product Quality Certification
- (8) PPL Nuclear Material Transactions Form DOE/NRC Form 741
- (9) PPL SSES Bundle Inspection Sheet
- (10) PPL Nonconformance Reports (47)
- (11) PPL Customer Site Receiving Inspection Record
- (12) PPL Radiation Survey Report

Findings

The inspector found documentation complete and in order with the following exceptions:

- not all of the shipment backages have their respective radiation survey sheets enclosed
- (2) not all of the shipment packages have the respective NCR's filed with them
- (3) not all of the Shipment packages have the letter to Union Carbide from PPL attached to Nuclear Material Transaction Form DOE/NRC Form 741, as some had.

This item will be pursued on a subsequent inspection and is designated Unresolved Item (388/83-28-04).

7. Plant Tours

The inspector made several tours of the facility during the course of the inspection. The tours included the containment drywell, reactor building, turbine building, control structure, control room, refueling floor, battery rooms, diesel generator rooms, spray pond, and ES/ pump house.

The inspector observed work in progress, housekeeping, clearliness controls, storage and protection of components, piping and systems, and witnessed tests in progress. He also observed final disposition of the remaining nuclear fuel bundles involved in nuclear fuel receipt, handling and storage.

No items of noncompliance were identified and no unacceptable conditions were noted.

8. Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during the inspection are discussed in Sections 2, 3 and 6.

9. Exit Interview

At the conclusion of the site inspection on December 29, 1983, an exit meeting was conducted with the licensee's senior site representatives (denoted in Paragraph 1). The findings were identified and previous inspection items were discussed. At no time during this inspection was written material provided to the licensee by the inspector.

ATTACHMENT A

PRE-OPERATIONAL TEST PROCEDURE REVIEWS

- P200.1B Revision O, Approved December 9, 1983 Cold Functional Test
- (2) P254.1B Revision O, Approved December 11, 1983 Emergency Service Water
- (3) P253.2A Revision O, Approved December 11, 1983 Standby Liquid Control System Initiation Instrument Loop
- (4) P279.9A Revision O, Approved December 11, 1983 Post Accident Area Rad Monitor
- (5) P234.1B Revision O, Approved September 8, 1983 Leactor Building HV
- (6) P270.1B Revision O, Approved September 8, 1983 Standby Gas Treatment
- (7) P278.4A Revision O, Approved September 23, 1983 Traversing In Core Prope
- (8) P245.1A Revision O, Approved September 22, 1983 Feedwater System
- (?) P249.1B Revision O, Approved December 2, 1983 Residual Heat Removal System
- (10) P251.1B Revision O, Approved November 22, 1983 Core Spray System Unit 1 - Unit 2 Interlock
- (12) P234.4B Revision O, Approved September 20, 1983 Emergency Switchgear Room Cooling System
- (13) A293.2A Revision O, Approved November 3, 1983 Turbine Valves, Valve Test, EHC, and Supervisory Systems
- (14) A290.2A Revision O, Approved November 14, 1983 Safety Parameter Display System Power Supply
- (15) A203.1A Revision 0, Approved November 3, 1983
 13.8 KV System

Attachment A

- (16) A211.1B Revision 0, Approved November 3, 1983 Service Water System
- (17) A272.1B Revision O, Approved November 14, 1983 Gaseous Radwaste
- (18) A237.1B Revision O, Approved November 22, 1984 Makeup, Transfer and Storage, Condensate and Refueling Water Transfer
- (19) A285.2B Revision 0, Approved November 14, 1983 Freeze Protection

ATTACHMEN B

PRE-OPERATIONAL TEST RESULTS EVALUATION

- P255.1A Revision O, Approved August 22, 1983 Control Rod Drive Hydraulic System Test results approved December 6, 1983
- (2) P264.1A Revision O, Approved October 4, 1983 Reactor Recirculation System Test results approved December 6, 1983
- (3) P279.5A Revision O, Approved May 30, 1983 PERMS - Offgas Treatment Test results approved December 6, 1983
- (4) P256.3A Revision O, Approved October 21, 1983 Rod Worth Minimizer Test results approved December 8, 1983
- (5) P252.1A Revision O, Approved September 26, 1983 High Pressure Coolant Injection Test results approved December 8, 1983
- (6) P278.1A Revision D, Approved September 6, 1983 Source Range Neutron Monitors Test results approved November 16, 1983
- (7) P249.1A Revision 0, Approved September 7, 1983 Residual Heat Removal System Test results approved December 6, 1983
- (8) P233.4A Revision 0, Approved October 9, 1983 Post Accident IE Power Test results approved December 6, 1983
- (9) P280.1A Revision O, Approved July 1, 1983 Reactor Non-Nuclear Instrumentation Test results approved December 8, 1983
- (10) P273.2A Revision O, Approved August 2, 1983 Containment H² Recombiner Test results approved December 15, 1983
- (11) P275.1A Revision 1, Approved November 18, 1983 24 Volt DC System Test results approved December 15, 1983
- (12) A297.1A Revision O, Approved June 21, 1983 Stator Cooling System Test results approved November 16, 1983

Attachment B

- (13) A299.2B Revision O, Approved March 20, 1983 Communication System Test results approved December 15, 1983
- (14) A235.2B Revision 0, Approved November 14, 1983 Freeze Protection Test results approved December 15, 1983
- (15) A274.1B Revision O, Approved August 8, 1983 Nitrogen Storage and Supply Test results approved December 15, 1983
- (16) FCI-M-224 Revision 1, Approved June 6, 1983 Reactor Pressure Vessel and Associated Piping Hydrostatic Test for Unit 2 Test results approved June 21, 1983

ATTACHMENT C

STARTUP TEST PROCEDURE REVIEWS

- (1) ST-3.0 Fuel Loading Revision 2 draft copy
- (2) ST-3.1 Installation of Neutron Sources and Fuel Loading Chambers Revision 3 draft copy
- (3) ST-3.3 Fuel Loading Revision 3 draft copy
- (4) ST-3.4 Core Verification Revision 2 draft copy
- (5) ST-5.0 Control Rod Drive System Revision 2 draft copy
- (6) ST-5.1 Insert-Withdrawal Checks Revision 2 draft copy
- (7) ST-5.2 Friction Measurements Revision 2 draft copy
- (8) ST-5.3 Zero & Rated Pressure Scram of Individual Rods Revision 2 draft copy
- (9) ST-5.5 Scram Testing of Selected Rods Revision 3 draft copy
- (10) ST-5.6 Insert Withdrawal Checks of Selected Rods Revision 2 draft copy
- (11) ST-5.7 Scram Timing of Selected Rods During Planned Scrams of Startup Test Program Revision 3 draft copy
- (12) ST-5.8 Post Scram Differential Pressure Measurements Revision 1 draft copy
- (13) ST-25.0 Main Steam Isolation Valves Revision 2 draft copy
- (14) ST-25.1 MSIV Functional Test Revision 2 draft copy
- (15) ST-25.2 Full Closure of the Fastest MSIV Revision 2 draft copy

Attachment C

- (16) ST-25.3 Full Isolation Revision 2 draft copy
- (17) ST-99.1 Test Plateau O (Open Vessel) Testing draft copy

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