

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket/Report No.: 50-443/91-02

License No.: NPF-86

Licensee: Public Service Company of New Hampshire, New Hampshire Yankee
(NHY) Division

Facility: Seabrook Station, Seabrook, New Hampshire

Dates: February 8 to March 15, 1991

Inspectors: N. Dudley, Senior Resident Inspector
R. Fuhrmeister, Resident Inspector

Approved By:

N. Dudley FOR
E. C. McCabe, Chief, Reactor Projects Section 3B

3-29-91
Date

OVERVIEW

Operations: The reactor was operated safely. While lack of control of cyclic loads on cross-tied non-vital electrical busses resulted in a reactor trip, operator response to the trip and to several planned power transients was good.

Radiological Controls: Technician response to a routine containment entry and identification of a visitor's radioactive watch was professional.

Maintenance/Surveillance: Maintenance was well-controlled. Deficiencies identified during surveillance testing were properly corrected.

Security: An apparent violation was cited for unlocked Safeguards storage cabinets. An exercise conducted by a third party contractor provided excellent security training and identified areas for improvement.

Emergency Preparedness: Active cooperation with Massachusetts local and state representatives in developing emergency plans was evident.

Engineering/Technical Support: Resolution of identified system and component problems was good. Followup of events and support of maintenance activities was good.

Safety Assessment/Quality Verification: Workers' questioning attitude was good.

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DETAILS

1.0 SUMMARY OF ACTIVITIES

1.1 NRC Activities

Two resident inspectors were assigned. The inspection hours included 30 backshift hours, of which 16 were deep backshift hours.

On February 20, the Region I Projects Section Chief for Seabrook toured the facility and met with the NHY President.

On March 4-8, there was a follow-up inspection by members of the maintenance team inspection. The results will be included in NRC Inspection Report 50-443/91-80.

On March 5-8, there was a region-based inspection of secondary chemistry controls. The results will be documented in NRC Inspection Report 50-443/91-03.

On March 6, NRC Chairman Carr visited Seabrook Station. The Chairman, accompanied by Mr. T. Martin, Region I Administrator, toured the facility and met with plant and corporate management. A representative from the Seacoast Anti-Pollution League participated in the plant tour and meeting.

1.2 Plant Activities

The plant was at 100% power at the beginning of the period. On February 12, the plant tripped due to a main turbine-generator trip caused by two electrical buses being de-energized when a breaker tripped open on overcurrent. The reactor was restarted on February 13 and power was raised to 60%.

On February 14, reactor power was reduced to 30% due to problems with steam generator chemistry and a Steam Generator Feed Pump (SGFP). On February 15, proper steam generator chemistry was established and power was raised to 50%. On February 24, the SGFP was restored to service and 100% reactor power was achieved the next day.

On February 28, reactor power was reduced below 30% due to steam generator chemistry problems. On March 1, proper steam generator chemistry was established and power was returned to 100%.

On January 25, 1991, the United States Court of Appeals for the District of Columbia denied appeals, by the state of Massachusetts and other intervenors, which challenged the NRC decision to issue a full power license to Seabrook.

2.0 OPERATIONS

2.1 Plant Tours

The inspector conducted daily control room tours which included reviews of operator log books, Technical Specification action statement tracking logs, tagout logs, and night orders. Assessments were made of Technical Specification action statements in effect, control room staffing, management oversight, operator awareness of plant conditions, and operator responses to alarms. No unacceptable conditions were noted.

The inspector conducted plant tours which included inspections of equipment, structures and housekeeping. Problems identified are discussed in this report. Minor discrepancies were turned over to the licensee and resolved.

2.2 Plant Events

On February 12, the plant tripped on a loss of oil pressure in the Electro-Hydraulic Control (EHC) system for the main turbine. That occurred when both EHC pumps were de-energized by the opening of the transformer secondary breaker feeding 1-ED-US-21 while 1-ED-US-21 and 1-ED-US-14 were cross-tied to allow preventive maintenance on the normal power supply to 1-ED-US-14. Plant response was complicated by the loss of power to secondary components (e.g., condenser vacuum loss made the steam dump valves unavailable, DC control power to supply breakers for some components indicated the breakers were shut even though the equipment was de-energized). Operations personnel took appropriate actions as directed by the Emergency Operating Procedures and as recommended by System Engineers. Electrical power was restored, plant systems were stabilized, and the cause of the trip was investigated. The breaker which tripped was tested for proper operation and trip set points were verified.

On February 12, in an occurrence unrelated to the reactor trip, the elevator winch motor in the Waste Process Building developed a ground which caused smoke. No fire occurred and the smoke ceased when the motor was de-energized. An Auxiliary Operator was overcome by smoke, transported to an offsite medical facility, treated and released.

While raising reactor power after clearing the chemistry hold on February 14, the plant experienced a chemistry transient in the secondary system. This transient resulted in unsatisfactory steam generator high conductivity and power was return to 30%. Steam generator blow down was increased. The chemistry transient was attributed to a feedwater flow transient and a heater drain pump trip. On February 15, the chemistry hold was cleared and power escalation commenced early that afternoon. Then, when Steam Generator Feed Pump SGFP-A was started, a loud noise was heard. Reactor power was leveled and held at 50% while investigating and correcting the noise (see Details 4.1 and 7.2).

On February 21, long-term condensate recirculation valve CO-FV-4042 was found to be manually overridden at approximately 75% open. The manual override was repositioned to allow the automatic control system to close the valve. Operations' investigation determined that the valve had been manually overridden to 85% open following the reactor trip due to the de-energization of the automatic control system, which is designed to maintain flow through the condensate pumps. Automatic control was later established and verified by the Control Room Operator. However, the manual override on the valve was not correctly repositioned due to operator lack of familiarity with the operation of the valve. To prevent recurrence, Operations plans to provide manual operating instructions on a placard placed near CO-FV-4042.

On February 28, the plant again experienced a chemistry transient in the secondary system resulting in high steam generator conductivity and sulfates, and was returned to 30% power. The out of specification chemistry was attributed to the blowdown recovery system valve leakage, which is believed to have allowed sulfuric acid to leak by into the secured blowdown header during demineralizer regeneration. This was the first time a regeneration was performed with the system out of service for maintenance. To preclude recurrence, a temporary modification was developed to allow sampling of recovered blowdown prior to lining it up to the condenser. Chemistry was returned to specification by maximizing steam generator blowdown and directing it to the ocean. This event is discussed in more detail in NRC Inspection Report No. 50-443/91-03. Power escalation commenced the afternoon of March 1 and 100% power was achieved that evening.

2.3 EHC Excess Throttle Pressure Setpoint - Unresolved Item 91-01-01 (Closed)

This item addresses the January 12 turbine control valve test which resulted in opening the steam dump valves to control reactor temperature. The inspector reviewed the applicable procedure, OX1431.03, "Main Control Valve Weekly Test," and discussed the event with plant personnel. Moderator Temperature Coefficient (MTC) feedback is the preferred method of controlling reactor power, as documented in OX1431.03. Also, the Excess Throttle Pressure Limit setpoint is a field alignment performed in accordance with the General Electric Turbine Technical Manual. The setpoint was established with the unit at 100% power and was based upon steam header pressure and throttle pressure. The alignment was last performed in November 1990 at a steam header pressure of 975 psig.

On January 12, steam header pressure of 985 psig at 100% power caused the Excess Throttle Pressure Limit to shut the control valves when stage pressure feedback control was initiated in accordance with the surveillance procedure. The Excess Throttle Pressure Limit setpoint was properly reset using an approved work request which referenced the Technical Manual procedure.

NHY initiated discussions with General Electric to determine appropriate measures to either remove the Excess Throttle Pressure Limit or set a high enough value to account for changing plant conditions. Procedure OX 1431.03 was revised to clarify when to verify and adjust the stage pressure feedback signal, vice verifying the excess pressure setpoint as was incorrectly indicated in NRC Inspection Report No. 50-443/90-01. This item is closed.

3.0 RADIOLOGICAL CONTROLS

3.1 Containment Entry

The inspector participated in a containment entry on February 14, 1991 and observed the retest of a relay installed in the control circuitry for Containment Air Compressor 'B.' The relay test was performed with the reactor at power and with power escalation in progress. The pre-job briefing covered the tests to be performed and the radiological conditions to be expected. The Radiation Work Permit (RWP) indicated appropriate protective clothing to be worn and specified continuous HP technician coverage.

While in the containment, it was noted that the Low Range Self-Reading Dosimeter (SRD) for one member of the party showed no indication (off-scale). Dosimeters for the other members of the party were verified to be indicating properly, as was the High Range Self-Reading Dosimeter for that individual. The HP technician decided, in accordance with the discretion allowed in procedures, to allow the work to be expeditiously completed before all personnel exited the containment. The individual with the off-scale SRD was escorted to the Control Point and restricted from RCA (Radiological Control Area) access until his TLD was processed. The TLD reading indicated no unexpected exposure. These actions were in accord with procedure RP 12.1, "Reporting Lost, Off-Scale and Other Dosimeter Abnormalities," and other portions of the Station Radiation Protection Manual. Radiation protection practices were considered by the inspector to be excellent.

3.2 Radium Dial Watch

Following the March 6 tour of the RCA, a plant visitor alarmed the Nuclear Enterprises LTD, Model IPM-7, personnel contamination monitor during the whole body frisk which is required prior to exiting the RCA. The HP technician identified a watch as the source of radiation. The watch was surveyed and determined to contain fixed contamination which produced a 0.5 mrem beta dose rate on contact. The watch was returned to the visitor with a listing of the radioactive isotopes identified during the survey. The inspector concluded that the HP technicians followed program requirements and responded in a professional manner in this matter.

3.3 Digital Channel Operational Tests - Unresolved Item 90-18-01 (Closed)

The licensee performs digital channel operation tests (DCOTs) on radiation monitors by reducing the program setpoint below background radiation readings and verifying the proper alarm and control functions. Technical Specifications do not clearly define DCOT, and the adequacy of the surveillance test for establishing instrument and setpoint operability was questioned.

New Hampshire Yankee (NHY) submitted a License Amendment request which defined DCOT on January 24, 1991. The radiation monitor vendor, Sorrento Electronics, had endorsed the approach in an October 4, 1990 letter to NHY. Digital circuitry set points do not drift like analog circuitry set points do. By lowering the setpoint on a digital channel, a verification is

made that the alarm task in the monitor is using that location in memory, doing a comparison, and generating the required output. The operability of detectors and detector signals to the monitor is verified by daily automatic source channel checks, by continual diagnostic software checks, and by periodic channel calibrations.

The inspector verified that the DCOT procedures require a check of the entry of the correct setpoint at the completion of the procedures. The inspector concluded that NHY's present method of performing DCOT surveillances is acceptable. This item is closed.

4.0 MAINTENANCE/SURVEILLANCE

4.1 Maintenance

During the power escalation on February 14, operators noted a loud noise emanating from the SGFP-A enclosure. This noise was initially attributed to the turbine-pump coupling. The coupling was disassembled, cleaned, lubricated and reassembled. No abnormal conditions were noted. On February 15, SGFP-A was again started and the noise returned at a pump speed of approximately 4000 RPM. The pump was shutdown after taking vibration readings and foundation bolt torques. The pump-turbine alignment and piping positions were verified. The pump suction piping was disconnected. Sealing compound used to temporarily plug a leak on the pump suction flange was removed. The suction flange was reworked to eliminate steam cuts on the sealing surfaces. The pump and turbine were realigned based upon discussions with the manufacturer. Welds connecting the pump casing support lugs were inspected using the magnetic particle method. The pump rotating element was inspected using a baroscope. Several foundation bolts were retorqued. No other abnormalities were identified. The pump-turbine coupling was replaced.

On February 20, the pump was started with a vendor representative present. The abnormal sound remained and several vibration spikes were noted. After taking extensive vibration data, the pump was secured and tagged "out-of-service." After cooling, the pump was disassembled under direction of the manufacturer's representative. Upon disassembly and inspection of the internals, the vendor representative identified the absence of two O-rings from the outboard cover plate. This condition allowed some leakage from the pump discharge back to the suction. The pump was reassembled and tags cleared. When tested, the noise was no longer evident in the pump. Normal flow noise was evident in piping in the feed and condensate system. See Detail 7.0, Technical Support, for additional engineering details.

Work was controlled under work requests 90W005466, 91W001191, and temporary modification TMOD0036. Work practices, storage of disassembled pump parts, and personnel performance were assessed as good.

On February 25, the plant voluntarily entered an action statement of Limiting Conditions for Operation 3.3.3.5 and 3.3.3.6 in order to replace the electronics modules for the 'A' train Gammametrics Radiation Monitoring System which provides neutron monitoring following a

Loss of Coolant Accident (LOCA). The electronics modules were replaced with factory modified units using a different power supply. This change was performed to increase the reliability of the Gammametrics System, which has had several power supply failures to date at Seabrook. Work was performed in accordance with MMOD 89-259 and work request 90W004099. The technicians performing the work were knowledgeable of the job and consulted the System Engineer for help with difficulties encountered. Quality Control personnel were on hand to witness holdpoints and inspect work quality in general. Work was completed ahead of schedule and the LCO was cleared after conducting post-work testing. The maintenance was well-controlled by knowledgeable technicians and no unacceptable conditions were identified.

4.2 Surveillance

The inspector observed the performance of portions of Surveillance Procedure IX 1680.921, "Solid State Protection System (SSPS) Train A Actuation Logic Test," and discussed the purpose of several of the procedural steps with the I&C technician. Other evolutions conducted in parallel with the surveillance were controlled by the Unit Shift Supervisor so that the supervision of the surveillance was not degraded. Communications, on headsets, were maintained between the Control Room Operator, the I&C technician performing the test and the auxiliary operator in the vital switchgear room during the testing of the reactor trip breaker. The Unit Shift Supervisor's permission was requested for all steps requiring the repositioning of the reactor trip breaker and the I&C technician read each step, placed his hand on the appropriate switch and verified the procedural requirements prior to taking any action. The inspector concluded that this surveillance was conducted in accordance with procedural steps by knowledgeable personnel and that formal communications and control protocols were followed.

The inspector observed performance of surveillance tests OX1431.02, "Valve Testing for Turbine Stop Valves," and OX1431.04, "Valve Testing for Turbine Intercept Valves." The tests were coordinated with Technical Support personnel, who monitored Heater Drain System response to the transients. No unacceptable conditions were identified.

The inspector observed testing of the Atmospheric Steam Dump Valves (ASDVs) performed in response to a problem identified at Palo Verde. The valves were stroke tested, and valve position and actuator air pressure were continually monitored and recorded. The air pressure required to lift the pilot valve and the main valve disc were determined. The data will be compared to previous test data to permit identification of any degradation of the actuators similar to that noted at Palo Verde. During testing of the 'B' ASDV, it appeared that the test device for measuring valve position became detached. The inspector verified that the actuator pressure trace exhibited expected phenomena and could be used to extract the necessary information. The testing was well-controlled and anomalies in the data taken were actively pursued. No unacceptable conditions were identified.

5.0 SECURITY

5.1 Plant Tours

To assure security adequacy, the inspector toured the Central Alarm Station, the Secondary Alarm Station, and the protected area fence, and reviewed the shift logs and observed routine personnel access control measures. No deficiencies were noted.

5.2 Unlocked Safeguards Cabinet

On March 8, 1991, at approximately 8:55 a.m., a Safeguards cabinet in the administration building inside the protected area was discovered unattended and unlocked. An inventory of the cabinet was conducted, an investigation was initiated, and a one-hour notification was made to the NRC. All safeguards material in the cabinet was accounted for. The one-hour notification was later retracted based on Generic Letter 91-03, "Reporting of Safeguards Events."

Security's investigation determined that the cabinet had been unlocked from about 2:00 p.m. on March 7 until 8:55 a.m. on March 8. All visitors inside the protected area during that time were verified to have had no access to the unlocked file cabinet. The individual who left the cabinet unlocked was interviewed and removed from the safeguards access list. The individual stated he thought he had locked the safe.

Contributing factors were determined to be the absence of the individual who had primary responsibility for locking the cabinet and the use of a push-button lock to secure the file cabinet during the normal work day. Short-term corrective actions included removal of push button locks on 23 filing cabinets used to store safeguards material and briefing the responsible safeguards custodians, individually, of the importance of maintaining control of safeguards material. A review by NHY of the control of safeguards material in the main control room resulted in the relocation of safeguards material from the tagging office into the horseshoe area.

A meeting was scheduled with all personnel having responsibility for storage of safeguards material to determine appropriate actions needed to prevent recurrence of the event. Procedural changes and additional postings on safeguards containers were being evaluated.

10 CFR 73.21(d)(2) requires safeguards information to be stored in a locked security storage container. NHY's Record Management Manual, Chapter 3, "Document Receipt, Processing, and Control," Paragraph 6.4, "Physical Protection of Safeguards Information," requires that unattended safeguards information in a controlled access area be securely stored. The failure to securely store safeguards material is an apparent violation (NV4 50-443/91-02-01)

5.3 Exercises

On the weekend of February 22 & 23, the station conducted force-on-force exercises with contractors for training of security force personnel. The training was intended to simulate a response to a confirmed armed intrusion. The exercise was based upon the concept of a 'shadow force' wherein each individual who would normally respond had a 'shadow' who responded for the exercise. This ensured no interruption of normal security. The 'shadow force' and 'intruder' weapons were verified empty and exercise personnel were verified to not be carrying live ammunition prior to the commencement of each exercise. New Hampshire Yankee is taking actions to rectify weaknesses identified during the exercises. The inspector concluded that this training was beneficial to assuring a high quality security function.

6.0 EMERGENCY PREPAREDNESS

The inspector held discussions with New Hampshire Yankee (NHY) Emergency Preparedness staff concerning NHY's actions taken in response to a Massachusetts's Executive Order issued on March 6, 1991. The Order directed Massachusetts state agencies to begin developing emergency plans for any emergency originating at Seabrook.

NHY had previously assigned a Massachusetts Transition Project Manager, who had been working with the Massachusetts local communities inside the ten mile Emergency Planning Zone (EPZ) on emergency preparedness. The three major tasks the project manager was working to accomplish were the establishment of an interim response plan, restoration of pole-mounted sirens, and development of individual community emergency plans. In response to the Order, a meeting was planned with the newly appointed Director of the Massachusetts Civil Defense Agency to discuss NHY assistance in developing a state emergency preparedness plan.

The inspector concluded that NHY was actively cooperating with Massachusetts local and state representatives to develop and implement emergency preparedness plans.

7.0 ENGINEERING and TECHNICAL SUPPORT

7.1 Waste Gas - Vent Gas System Planned Improvements

On December 14, 1990, the System Support Manager issued a memorandum to the Assistant Station Manager. The memorandum identified and prioritized problems with the operation of the waste gas and vent gas (WG/VG) system. After additional study of system operations, the Technical Support Division formally presented, on January 31, 1991, proposed maintenance actions to resolve the problems.

The inspector walked down the WG-VG system, reviewed the December 14, 1990 memorandum, attended the formal presentation, and held discussions with the plant staff. The three major concerns identified by Technical Support were the adequacy of system capacity, the operation of the WG-VG chillers, and the collection of water in the degasifier and sample lines. As a

result of the formal presentation, work was authorized to correct the major identified problems. Design Coordination Reports 88DCR82, which modifies the drain system from the WG-VG chillers, and 90DCR19, which installs hard-piped drains on the degasifier and sample lines, were approved for installation. Twelve work requests and 89DCR67, which replaces leaking pressure control valves, were approved for completion during the forthcoming refueling outage.

The inspector verified that system maintenance was in progress and that Operations personnel were able to continue operations of the WG-VG system and monitor any gaseous releases to the environment. The inspector concluded that identified problems in the WG-VG system were being resolved by Technical Support and that management was allocating resources to support the effort. No unacceptable conditions were identified.

7.2 Steam Generator Feed Pump Vibration

The inspector observed activities of Technical Support Group personnel relating to the investigation of the noise emanating from the 'A' SGFP cubicle. The effort included taking vibration data on the pump and turbine (both coupled and uncoupled), researching vendor manuals, contacting the vendor service organization, and walking down the piping system in an attempt to identify changes or anomalies. This effort ultimately included vendor assistance for vibration measurement and analysis, and pump manufacturer service representative onsite support. Pump internals inspection by the service representative revealed that two 'O'-rings internal to the pump casing were missing. The noise was attributed to bypass flow from the pump discharge to the pump suction through the gap left by the missing O-rings. Control of work and personnel performance were considered good.

7.3 February 12 Trip Evaluation (91-SIR-003)

The inspector monitored the investigation of the circumstances surrounding the February 12 turbine trip-reactor trip. Station electrical load calculations were reviewed to determine the maximum amperage drawn by Unit Substations US-14 and US-21. Individual load currents were recalculated for all components supplied from these busses.

Technical Support personnel determined what loads supplied from Unit Substations 14 and 21 were in operation prior to the event. Plant load calculations were reviewed to determine amperage loadings associated with those components. These loads were determined to be slightly below the 1600A long-time trip for the transformer secondary breaker supplying US-21. The 1600A limit is specified in Procedure ON1046.08, "Non-Vital 480 Volt Operation," which was used to perform the initial cross-tie. The amperage was verified as < 1000 amps after the cross-tie was established. Technical Support personnel determined that the turbine building crane was used shortly before the plant trip and put short pulses of locked-rotor current (1256A) on the bus. The trip was attributed to these 'bursts' of current in combination with the cyclic load of the guardhouse heating system.

The inspector reviewed Station Information Report (SIR) 91-003 which evaluated root causes of the event. Long-term corrective actions identified in the SIR included administrative control of cyclic loads while electrical busses are cross-tied. The inspector noted that, on March 14, with US-16 cross-tied to US-14 to allow cleaning of the US-16 transformer cubicle, loads which could cause large cycles were tagged out of service.

The inspector concluded that Technical Support's evaluation of the event was good. No unacceptable conditions were identified.

7.4 ESF Actuation-Loss of Power to Vital Instrument Panel - LER 87-005-01 (Closed)

The supplement to the LER documents the completion of modifications to inverters EDE-I-1E and EDE-I-1F. The modification was performed to reduce sensitivity of the DC undervoltage sensing circuit to AC electrical noise. Additional modifications were performed to correct deficiencies identified during the follow-up of issues raised by the NRC Vendor Inspection Branch. After completion of the modifications, testing verified proper operation of both inverters. This item is closed.

8.0 SAFETY ASSESSMENT/QUALITY VERIFICATION

8.1 Questioning Attitude Issue

In the cover letter of NRC Inspection Report 50-443/90-24, the questioning attitude of New Hampshire Yankee (NHY) Engineering was raised. NHY Independent Review Team (IRT) reviewed this issue. The engineers who designed a modification to cable vaults specified a 'core-bore' so as to have a hole drilled, not jack-hammered and then grouted to appropriate size and round. While boring the holes in the electrical cable vault covers, one of the cores removed was noted to have one more reinforced bar cut than was permitted by the work documents. This condition was subsequently verified by Engineering to be acceptable per design calculations. Workers also noted that the diameter appeared to be somewhat larger than the prescribed 4", but were not concerned since a 4" expanding plug would be used to close the hole. When insertion of the plugs was attempted by a different crew, it was discovered that the plugs were just under 4" in diameter and were intended to expand to fill a 4" hole. After evaluation, larger plugs were installed to seal the holes.

The inspector met with the IRT on February 19 to discuss this issue and the sequence of events. The inspector concluded that workers had remained focused on the safety of properly boring and plugging holes in the electrical vault covers and had demonstrated an appropriate questioning attitude. The inspector concluded that there had been adequate response to worker concerns and had no further questions.

8.2 NQG Evaluation of Thread Failure Analysis

The Nuclear Quality Group (NQG) evaluated the feedwater regulating valve failure which caused the November 9, 1990 reactor trip. NHY's Technical Support Group had requested the evaluation due to the potential for generic implications and resultant safety concerns. The 1/4" brass nipple which failed was sent for metallurgical analysis by an independent laboratory. Analysis results and an engineering evaluation of the results performed by Yankee Nuclear Services Division were reviewed by NQG. In addition, NQG personnel performed NDE on the remaining threaded joints from the failed assembly and on similar joints on other assemblies. No linear indications were revealed. NQG therefore concurred that no generic concern existed. However, Technical Support personnel are continuing to walkdown the secondary systems to identify and evaluate potential problem areas for rework. The inspector concluded that the root cause analysis was thorough and that appropriate corrective measures were being implemented, and had no further questions.

8.3 SORC Meeting for Review of Gammametrics Modification

A special meeting of the Station Operations Review Committee (SORC) was called on February 22 to review Minor Modification MMOD 89-259. This modification replaces the electronics boxes for the Gammametrics neutron monitoring system with a factory modified and tested unit containing a more reliable power supply.

Discussions concerned the advisability of performing the modification at power. That would require entry into a Technical Specification Limiting Condition for Operation (LCO) action statement. Since the Gammametrics system supplies the input to the boron dilution monitor, SORC determined that performing the modification while shutdown would still require entry into a LCO action statement. SORC concluded that, given the failure experience, performing this modification under an LCO would have a net positive result on safety due to the improved reliability expected with the new power supply. The licensee therefore decided to perform the MMOD to the 'A' train Gammametrics under the 7-day LCO action statement. Modification of one train was subsequently completed without incident.

The inspector concluded that proper safety concern was demonstrated in this effort.

9.0 MEETINGS

The scope and findings of the inspection were discussed periodically throughout the inspection period. An oral summary of the inspection findings were provided to the plant manager and his staff at the conclusion of the inspection.

NRC Chairman Carr and Mr. T. Martin, Region I Administrator met with NHY staff at the Seabrook Nature and Science Center on March 6, 1991. Slides used during the licensee presentation are provided as Attachment 1. Chairman Carr held a press conference at the Nature and Science Center immediately after the meeting.

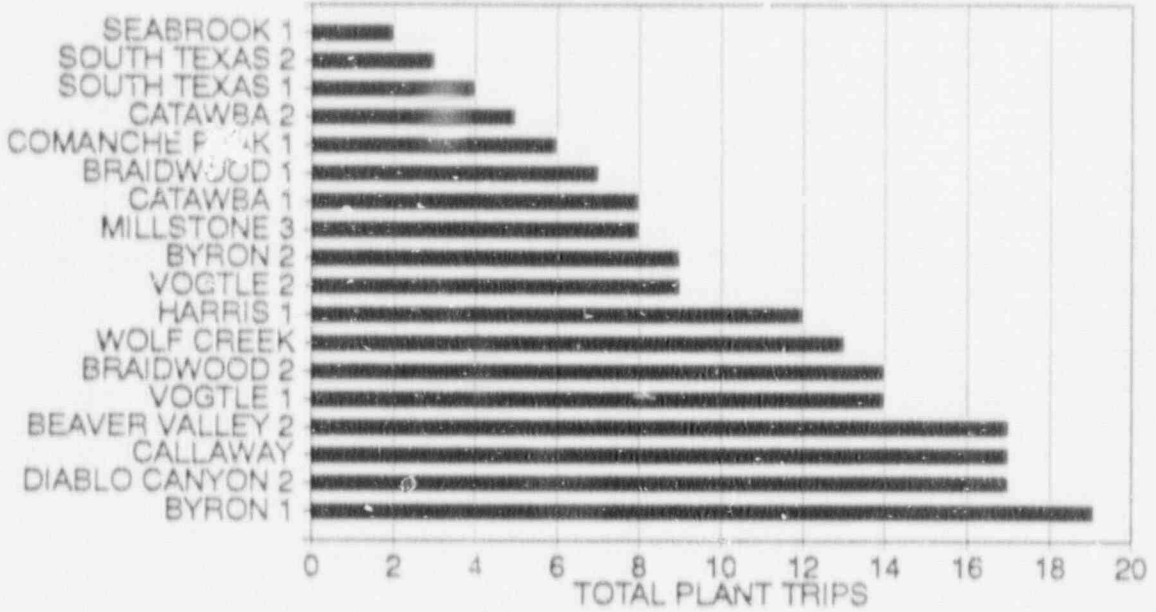
A region-based inspector conducted the following exit meeting during this report period.

<u>DATE</u>	<u>SUBJECT</u>	<u>REPORT NO.</u>	<u>INSPECTOR</u>
3-8	Secondary Chemistry Control	91-03	Patinaik

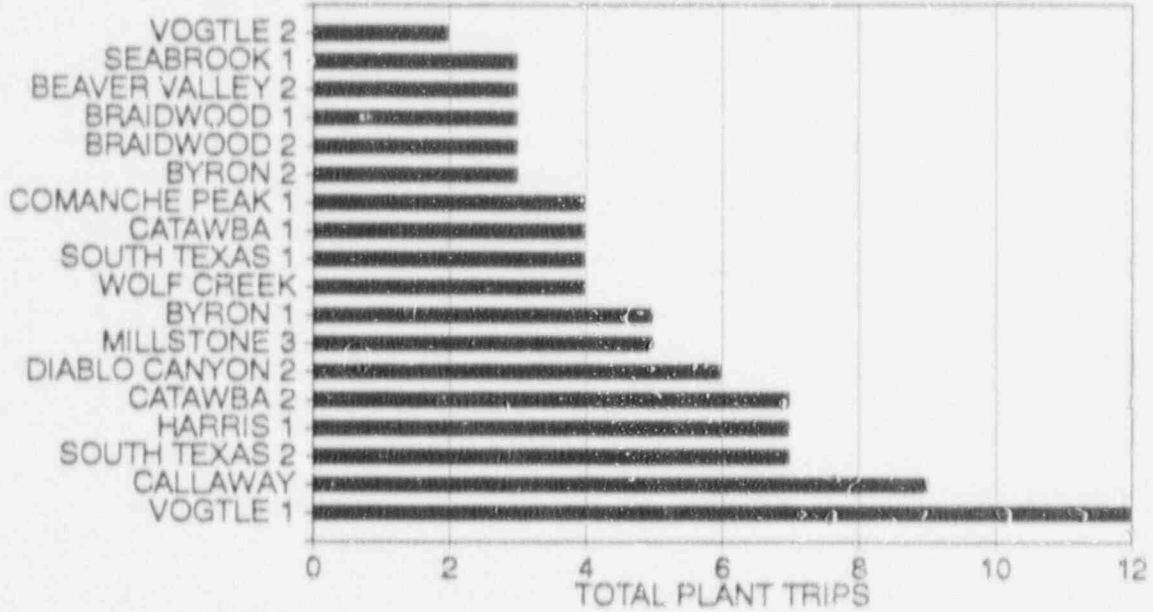
Attachment 1

NEW HAMPSHIRE YANKEE
PRESENTATION TO
CHAIRMAN CARR
SEABROOK NATURE & SCIENCE CENTER
MARCH 6, 1991

PLANT TRIPS
 — DURING STARTUP TESTING —
 (Westinghouse 4-Loop PWRs)



PLANT TRIPS
 — FIRST SIX MONTHS OF FULL POWER OPERATION —
 (Westinghouse 4-Loop PWRs Licensed Since 1984)



81-120-NRCTRIPS

New Hampshire
Yankee