January 23, 1996

Mr. Ted C. Feigenbaum
Senior Vice President and Chief Nuclear Officer
North Atlantic Energy Service Corporation
Post Office Box 300
Seabrook, New Hampshire 03874

SUBJECT: SEABROOK STATION INTEGRATED PERFORMANCE ASSESSMENT PROCESS
INSPECTION REPORT NO. 50-443/96-80
IN-OFFICE REVIEW RESULTS

Dear Mr. Feigenbaum:

During the period January 2-11, 1996, an assessment team under the direction of Region I and composed of members from NRC Region I, NRR/DRP, the Office of Analysis and Evaluation of Operational Data, and NRC Region IV, performed an in-office assessment of performance for the Seabrook Station. This assessment was conducted using Inspection Procedure 93808, "Integrated Performance Assessment Process (IPAP)." On the basis of docketed information and the information submitted by your staff in response to our request dated 12/01/95, the IPAP team concluded that the Seabrook Station has significant strengths in the areas of plant operations, maintenance, engineering, security, health physics and emergency planning. A summary of the in-office assessment is contained in the enclosed report, including a performance assessment/inspection planning tree.

The next step in the assessment process is to continue the assessment of performance on-site. This step will include inspection and observations to verify the in-office findings and develop additional information on topics where the team was not able to reach firm conclusions on the basis of the written record. The results of the in-office assessment will be used to focus the on-site assessment. Overall ratings for each functional area will be assigned after the on-site assessment. The final assessment results will be transmitted to you in NRC Inspection Report 50-443/96-80.

I want to emphasize that the above information is preliminary and is provided for your information only. No response to this letter or to these assessment results is required or expected. Should you have any questions, please contact me or Mr. E. Harold Gray of my staff at (610) 337-5325.

Sincerely,

Original Signed By:
John F Rogge, Branch Chief
Division of Reactor Projects

Docket: 50-443
Enclosure: Summary of In-Office Assessment

IE01

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ENCLOSURE

SEABROOK STATION

Integrated Performance Assessment
In-Office Review Results

In an effort to better integrate and assess licensee performance, and to better utilize inspection resources, the NRC has initiated the Integrated Performance Assessment Process. This process is described in Inspection Procedure 93808, "Integrated Performance Assessment Process (IPAP)." A team of NRC personnel not normally associated with routine inspection activities at the Seabrook Station was assembled. This team developed an integrated perspective of licensee strengths and weaknesses based upon a review of historical NRC documents and licensee historical information.

The in-office review results are visually displayed in Attachment 1, "Performance Assessment/Inspection Planning Tree, Assessment of Licensee Performance, In-Office Review Results." The following paragraphs provide a summary discussion of the in-office review conclusions. Inspection areas specifically identified are in addition to the element attributes specified in NRC Procedure 93808, Appendix B. The recommendations of the level of inspection effort discussed below are preliminary. The team's recommendations will be finalized after the on-site assessment.

1.0 SAFETY ASSESSMENT/CORRECTIVE ACTION

1.1 Problem Identification

The team found that the North Atlantic Energy Service Corporation (NAECo) formal reporting process was a strength, and many problems and solutions identified by the line organizations were documented. However in at least one instance, it appeared the evaluation of a transformer failure lacked focus. Only after a second similar failure occurred and the extent of equipment damage related to the first transformer failure was recognized, did the evaluation process become more organized and thorough, with responsibilities more clearly defined. Self-assessment programs appeared to lack consistent application across the line organizations and lacked site-wide formal program guidance. However, self-assessment programs have been established by a number of line organizations, and were being developed for others. Quality Programs has established a set of self-assessment guidelines for the line organizations. Self-assessments in maintenance and site services appear to be very good. A long-standing but informal Security self-assessment and corrective action program has been in place but was not proceduralized, although some procedures for certain aspects have recently been written and others were in progress. NAECo's independent assessment activities including quality assurance, quality control, SORC, and NSARC appear to be effective. However, SORC was not always as effective as it could be. NSARC, on several occasions, has identified weaknesses in documents previously approved by SORC. Additionally, NSARC's effectiveness could be improved with consistent attendance by the plant manager.

The team will assess the effectiveness of established self-assessment programs and the progress made to establish a uniform site-wide self-assessment program.

The team recommended that the NRC reduce inspection effort in this area.

1.2 Problem Analysis and Evaluation

NAECo has a strong and effective site-wide program to identify problems and to evaluate trends. The licensee's system engineers maintained excellent oversight of the systems for which they were responsible. An annual system report provided key performance data and identified major equipment failures, any significant trends, and the status of planned improvements. The licensee has implemented a PC/LAN link with the plant computer to allow effective, real-time monitoring of equipment/system performance parameters by the system engineers. The Occurrence Review Committee (ORC) met daily to review Abnormal Condition Reports (ACR) and work requests, and system engineers reviewed work requests for adverse trends. The effectiveness of the ORC was enhanced by membership and responsibility changes, reviewing all corrective action documents, assigning priorities and responsibility for corrective action. The Maintenance Department's extensively detailed documentation of maintenance activities provided a chronological record of what was done and the difficulties encountered. The licensee's program for root cause evaluation appeard to be good, but there had been a few failures to determine the correct root cause resulting in repeat occurrences. The Station Operation Review Committee (SORC) and Nuclear Safety Audit Review Committee (NSARC) reviews were effective, but could be improved.

The team will review the adequacy of root cause evaluations, equipment/system performance parameters, and SORC and NSARC recommendations.

The team recommended that the NRC maintain a normal inspection effort in this area.

1.3 Problem Resolution

NAECo's corrective action process had been improved, and it appeard to have the elements for an effective program. However, actions to resolve problems and implement corrective actions were not always fully effective. In several instances, corrective actions failed to prevent reoccurrence of problems, and in others there was a failure to verify the effectiveness of the actions put in place. The commitment management program was very good, but there was a large backlog of outstanding commitments. NAECo's programs to review industry experience appeared to be effective. For example, in response to an Information Notice regarding the potential for pressure-locking of containment sump suction gate valves, the licensee developed an evaluation of the potential for similar occurrence at Seabrook to support continued operation

until a long-term modification could be made. A review of other similar gate valve applications identified several other valves which could experience pressure-locking.

The team will review the effectiveness of the corrective action program, outstanding commitment backlog, and other responses to identified events.

The team recommended that the NRC maintain a normal inspection effort in this area.

2.0 OPERATIONS

2.1 Safety Focus

The licensee's performance with regard to safety focus was mixed. Strengths were good overall control of operations and maintenance activities. Examples include manual reactor tripping following loss of both electro-hydraulic control pumps, using "work arounds" to minimize challenges to operators and promote nuclear safety, appropriate consideration of probabilistic risk assessment data in scheduling work and providing adequate redundancy of safety-related equipment, and the reduction in the number of licensee event reports (LERs). Weaknesses related to exceeding the licensed power level three times, the inadvertent heatup of the spent fuel pool, lack of focus following the manual reactor trip due to loss of both electro-hydraulic control pumps, recurring tagging problems due to 1994 outage changes, lack of time and manpower to plan and review these changes, and the potential consequences of unknown conditions that if/when identified would lead to LERs.

The team will evaluate the past and present operating decisions including power level control, on-line maintenance, work arounds, the use of probabilistic risk and events. Management control of operations including tagging, staffing, and technical and safety reviews will be evaluated.

The team recommended that the NRC maintain a normal inspection effort in this area.

2.2 Problem Identification and Resolution

2.2.1 Problem Identification

The licensee's performance with regard to problem identification was acceptable. Strengths were identifying reactor coolant leakage and taking proactive actions in tracing the source, locating a feedwater isolation valve that had a hydraulic oil control circuit problem, achieving an alarm free main control board, monitoring and evaluating the generator exciter centrifuging epoxy, and finding that the main steam safety valve testing may be non-conservative per Westinghouse. In addition, the identification of numerous conditions not meeting the technical specifications (TS) surveillance requirements such as during a nuclear instrument (NI) calibration, an inoperable axial flux difference (AFD) monitor, the primary closed cooling water (PCCW) pump areas temperature, the wiring for over-temperature and over-power delta-T reactor trip channels, emergency busses E5 and E6 loss of

voltage and degraded voltage operability, two main steam drain valves with excessive stroke times, the containment equipment hatch airlock seal leakage, and shuffling of rod control cluster assemblies (RCCAs) and thimble plugs in the spent fuel pool with inoperable fuel storage building (FSB) emergency air cleaning system. Weaknesses were closely related to the strengths mentioned above. For example the PCCW pump room areas temperature not being adequately performed resulted from a non-conservative temperature switch setting being used. The root cause was the use of unapproved documents to obtain the setpoints. The negative aspect of finding conditions that do not meet TS surveillance requirements was that other undiscovered issues with undetermined consequences may possibly exist.

The team will review the problem identification process, self-assessment findings, and negative aspect of finding conditions that do not meet TS surveillance requirements.

The team recommended that the NRC increase inspection effort in this area.

2.2.2 Problem Resolution

The licensee's performance with regard to problem resolution appeared adequate. Strengths were effective review of the containment sump isolation valve inoperability, correcting the malfunctioning RCCA system, and eliminating two nuisance control room alarms. Weaknesses were two minor errors in the operating logs for emergency diesel generators, unrestrained temporary equipment in the control room, management follow-up to the letdown system isolation, and operator response to a RCCA deviation monitor alarm.

The team will evaluate outstanding work issues, adequacy of control room logs, and management oversight of operations.

The appropriate level of inspection effort in this area was indeterminate.

2.3 Quality of Operations

The licensee's performance with regard to quality of operations was generally good. Strengths included operator training and requalification programs, job performance measure administration. plant operator performance during both routine and emergency operations, operator's attentiveness to plant status including control room alarms, strong command and control supervision during reactor startup following unplanned manual reactor trip, strong operator support of the service water pump fastener replacement, and positive performance during a lowering steam generator water level event caused by a failed steam flow instrument. Other strengths included good use of the loose parts monitoring system, mostly excellent refueling outage work, good performance on "walk arounds," operator and plant management's handling of an increasing reactor coolant pump seal leak-off trend and resultant early shutdown for the third outage, and operator's handling of the Tewksbury transmission line problem. Weaknesses included simulator change backlog, simulator communications, command and control, and control board attentiveness during scenarios, some operators being complacent about shift turnovers, attention to detail as a problem indicated by the personnel hatch event, three

operator errors during refueling outage, training program not having full participation of workers and of management, no status tracking of the engineering support personnel (ESP) training program, tagging issues needing operations management attention, SRO candidates tending to over classify and not prioritize restoration of events involving loss of busses E5 and E6, one simulator board operator not giving the SRO the information explicitly asked for, configuration control and conflicting guidance issues during the Tewksbury transmission line problem.

The team will evaluate operation's performance during the last outage, and during normal and abnormal operations. The simulator change backlog and simulator effectiveness will be reviewed.

The team recommended that the NRC maintain a normal inspection effort in this area.

2.4 Programs and Procedures

The licensee's performance with regard to programs and procedures was generally good. Strengths were well controlled operations in the control room, operator's attentiveness to plant status, implementation of the procedure upgrade program, establishment of an alarm free main control board, well maintained emergency operating procedures (EOPs), evaluations of NRC information notices, and good operations control of refueling outage conditions. Weaknesses involved inadequate procedural guidance and other problems with the Main Plant Computer system, complex work control process, continued problems for SRO/RO candidates with instrument and control examination questions, plant specific deviations from the Westinghouse owners group (WOG) emergency response guidelines, very large backlog of operating experience review program (OERP) requests, inconsistency between two operations refueling procedures involving reactor cavity water level transmitters, and inconsistent component labeling between safety analysis report and procedures for remote safe shutdown system operation.

The team will review the progress of the procedure upgrade program, adequacy of new procedures, work control process, computer system control, and OERPs backlog.

The team recommended that the NRC maintain a normal inspection effort in this area.

3.0 ENGINEERING

3.1 Safety Focus

The recent NRC engineering team inspection found that engineering had addressed safety-significant issues. Engineering was providing good support to the plant. A review of a licensee's quality assurance audit supported the view that engineering's performance was strong. The system engineers had provided a high quality safety contribution, but the corresponding level of design engineering safety focus was not clear. In some cases, plant management demonstrated conservative safety perspectives for example with the

steam generator manway leakage problem. The licensee's engineering department was undergoing a major re-engineering effort so the effect on engineering safety focus was not known. There was some evidence of engineering's lack of knowledge of the licensing basis when discrepancies were found between the FSAR and procedures.

The team will examine the effects of the re-engineering process on safety focus, review operability determinations for conservatism, determine if the FSAR licensing basis was properly implemented into plant practices and procedures, and examine the extent of engineering involvement with operations and maintenance.

The team recommended that the NRC maintain a normal inspection effort in this area.

3.2 Problem Identification and Resolution

3.2.1 Problem Identification

Engineering had been effective in identifying problems. An example of this was system engineering recommending the need to upgrade the inspection activity of the underground service water pipe. The system engineers were knowledgeable of system design and operation, past problems, status of corrective actions and improvement plans. This was shown in the system engineers Annual System Performance Reviews.

The team will examine the effectiveness of self-assessments and the process for documentation of problems.

The team recommended that the NRC maintain a normal inspection effort in this area.

3.2.2 Problem Resolution

When problems were identified, their solutions were often delayed or incomplete without root cause analysis or appropriate corrective actions. Examples were the licensee's attempts to correct the main steam isolation valve (MSIV) problems, identification of the significant contributing factor for the containment personnel hatch event, and the root cause for the primary component cooling water heat exchanger tube degradation. In addition, corrective actions for the primary component cooling water surge tank level and hydrazine depletion appeared ineffective and the root cause for the high vibration of the emergency diesel generators was not determined. The team noted that there had been 52 temporary modifications installed in the plant in late 1994 which appears to be a large number for a one unit plant.

The team will assess the effectiveness of the engineering work priority system and the status and priority of the engineering work backlog. The team will review the temporary modifications installed in the plant, review the reactor coolant system loop flow transmitter drift problems, and the emergency diesel generator high vibration problems.

The team recommended that the NRC increase inspection effort in this area.

3.3 Quality of Engineering Work

The overall quality of engineering work was strong with a few exceptions. For example, the service water design basis document incorrectly identified that there was no safety function for the service water cooling tower pump discharge vacuum breaker valves. The corrective actions of Licensee Event Report (LER) 94-019 appeared to be insufficient since the root cause had identified hardened grease and dirt accumulation as one of the contributors to the failure of the high speed lock out relays without followup to other potentially affected components. The licensee had replaced the relays with another vendors product without mentioning that maintenance should check for grease and dirt accumulation in related areas. The training program for the engineering staff appeared well developed and implemented. The 10 CFR 50.59 safety evaluations were comprehensive.

The team will review modifications, Requests for Engineering Services, quality assurance audits, and Adverse Condition Reports.

The team recommended that the NRC maintain a normal inspection effort in this area.

3.4 Programs and Procedures

System engineers were found to be very knowledgeable of their systems. The system engineering transmitter trending program led to early discovery of transmitter drifting. No engineering programs were identified as a problem.

The team will review engineering involvement with reportability and operability procedures.

The team recommended that the NRC maintain a normal inspection effort in this area.

4.0 MAINTENANCE

4.1 Safety Focus

Maintenance activities appeared to be well planned and well controlled. The conduct of maintenance procedures were thorough and specific. An on-line maintenance program was implemented during 1995. The program takes into account regulatory compliance and risk assessment. However, the effectiveness of this program needs further review. There was evidence that Probabilistic Risk Assessment (PRA) was being factored into some maintenance activities; but, it was unclear whether this process was formalized. While there was evidence of a safety focus, maintenance program procedures do not reflect integration of Reliability and Safety Engineering Group (RSEG) risk reviews in maintenance implementation. Outage planning appears to be a strength. The licensee's capability to smoothly execute a shortened schedule for the recent refueling outage reflects both detailed planning and appropriate management oversight.

The team will review the overall effectiveness and use of PRA, including inspection planning, controlling procedures, and risk reviews used in maintenance implementation, and the control of on-line maintenance including safety considerations.

The team recommended that the NRC increase inspection effort in this area.

4.2 Problem Identification and Resolution

4.2.1 Problem Identification

The area of problem identification has shown significant improvement during 1995. The adverse condition report (ACR) system has been developed which provides a mechanism for any perceived problem identified by any plant worker to be documented and reviewed. ACRs were prioritized and assigned to appropriate organizations for resolution. Higher priority ACRs must have a root cause analysis. There was ultimate feed back to the persons who wrote the ACR. The strength of this system was that anybody can write an ACR and there was no lower threshold for problem identification. However ACRs was not a substitute for QA findings or engineering non-conformance reports. The Maintenance Group Self Assessment Program, as described in MTDI-001, appears to be well developed, however, little evidence was available that it was being effectively utilized.

The team will perform inspections to determine the effectiveness of both the new ACR system and the Maintenance Group Self Assessment Program.

The team recommended that the NRC maintain a normal inspection effort in this area.

4.2.2 Problem Resolution

Licensees overall effectiveness in problem resolution could not be assessed, and root cause analysis and ACR resolution require further review. The licensee issues trend reports on a monthly basis which include numerous graphs. However, the means by which this data was put to use was not clear. Significant NRC findings which were identified in early 1994, have been resolved by the licensee with adequate corrective actions. This indicates the licensee has been effective in resolving regulatory concerns.

The team will evaluate the effectiveness of ACR corrective actions, root cause analyses, the threshold for problem identification, resolution of QA/QC findings, QAs monitoring of maintenance activities, and the overall utilization of the Maintenance Group Self Assessment Program.

The appropriate level of NRC inspection effort in this area was indeterminate.

4.3 Equipment Performance/Material Condition

Overall plant equipment appeared to be well maintained. Corrective maintenance was a strength. Few significant maintenance problems were identified. Significant issues which had been identified in early 1994 such

as MSIV issues and the blowout of the equipment maintenance hatch have been corrected. The plant is relatively new, and equipment aging problems were not yet significant. There have been few breakdowns of major safety related equipment. The maintenance backlog appears to be well under control.

The team will review the existing preventive and predictive maintenance programs including the program bases, program effectiveness, and the maintenance backlog. Preventive maintenance tasks will be witnessed when possible.

The team recommended that the NRC maintain a normal inspection effort in this area.

4.4 Quality of Maintenance Work

The quality of maintenance work was good. Numerous corrective maintenance activities were reviewed. The licensee's work force was highly skilled with a good training and qualification program in place. First time repairs were effective and there was little rework. Problems identified in 1994 such as the faulty repair of MSIVs and the blowout of an equipment hatch appear to have been corrected. There were few workarounds. Review of licensee Quality Assurance Inspection Reports indicates that there may be a weakness in maintenance personnel implementation of foreign material exclusion (FME) requirements. Further team review of this potential weakness is required.

The team will review maintenance planning and FME controls, and observe maintenance work in progress and any FME being used.

The team recommended that the NRC reduce inspection effort in this area.

4.5 Programs and Procedures

There was an extensive program governing maintenance activities. This program contains a number of procedures controlling maintenance activities. The procedures were comprehensive. There was a Maintenance Manual, a Maintenance Management Manual, and a Planning and Scheduling Manual. In addition, there were several hundred corrective maintenance procedures, preventive maintenance procedures, surveillance procedures, and instrument and control calibration procedures. The existing procedures were effective in providing instructions for performing maintenance, testing and calibration activities. The licensee was currently performing a procedure upgrade program. This program will require further team review as to its status and effectiveness in improving procedures.

The team will review the procedure upgrade program including a determination of the status of the upgrade and the quality of the procedures. Evaluation of the use of UFSAR documentation, detailed procedures, and training in maintenance activities will be determined.

The team recommended that the NRC maintain a normal inspection effort in this area.

5.0 PLANT SUPPORT

5.1 Safety Focus

5.1.1 Radiation Protection

Generally very good safety focus was exhibited by the radiation protection group and other station groups. Strengths included inter and intra departmental communications, external and internal exposure controls and establishment of a self-assessment and corrective action effectiveness process. Pre-job briefings were also considered a strength and inspection effort performed during the most recent outage indicated overall very good performance. Notable exceptions included High Radiation Area access control issues and unnecessary occupational exposure associated with a missed inspection of rod control cluster assemblies. In addition, and most recently, inadequate ALARA planning for reactor head guide funnel inspection, and subsequent cancellation of the work activity indicated potential ALARA planning deficiencies. Regarding radwaste, the licensee recently initiated shipment of radioactive waste to a licensed disposal facility. This activity has not been reviewed by the NRC.

The team will complete the assessment of radiation protection and radwaste issues including overall radiological controls performance during the recently completed outage.

The appropriate level of NRC inspection effort was indeterminate.

5.1.2 Security

A strength of the security program was management support as evident by security equipment upgrades. Additionally, station security representatives effectively interact with other station departments as evident by their participation in the daily plan-of-the-day meeting, the weekly design-control request meeting, the weekly station-managers meeting, the monthly station safety meeting, and the monthly executive-safety meeting. Such interactions were indicative of security's focus on safety issues.

The team will confirm the adequacy of the security safety focus.

The team recommended that the NRC maintain a normal inspection effort in this area.

5.1.3 Emergency Preparedness

Licensee management was appropriately involved in EP by maintaining current emergency response organization (ERO) qualifications, and by their involvement in other areas such as emergency plan and procedure reviews, and EP program implementation. They were also involved in the turnover of off-site programs to Massachusetts and New Hampshire, and assisting the states in the relocation of the Wellesley, Massachusetts and Salem, New Hampshire reception centers. The EP staff was experienced, though it has been reduced from eight to six individuals since the last program inspection. The ERO was at least three-

deep in all positions. The licensee demonstrated good performance in the December 1994 full-participation exercise.

The team will reconfirm the adequacy of the EP program's safety focus.

The team recommended that the NRC reduce inspection effort in this area.

5.2 Problem Identification and Resolution

5.2.1 Radiation Protection

Generally very good and improving problem identification and resolution programs exist. Self assessment was used within the radiation protection and chemistry organizations but internal licensee reviews have identified a need for improvement in the self-assessment process. Overall, problem resolution appeared good but corrective actions were not always effective (e.g., worker adherence to High Radiation Area access control procedures). Also, it was not apparent that all appropriate radiation protection/radwaste programmatic findings were consolidated, trended, and evaluated in an comprehensive fashion. Lastly, in some instances (e.g;, radwaste processing, shipping handling), it was not apparent that individuals with appropriate levels of knowledge audited program areas.

The team will review the adequacy of the licensee's audit, self assessment, and problem resolution process for radiation protection and radwaste.

The team recommended that the NRC increase inspection effort in this area.

5.2.2 Security

Security implemented a formalized self assessment program, effective September 1, 1995. However, previously, there was an informal program in place which enabled security to identify, resolve, and prevent potential programmatic problems. Through the use of required quality assurance audits, in-house surveillance, continual interface with on site departments by attending meetings on a daily, weekly, and monthly basis, and the effective use of industry data (Trend Reports), the efforts have resulted in minimal security performance errors and was a strength. However, areas were noted in which trending was not being properly evaluated and corrective actions not taken to resolve apparent potential weaknesses.

The team will evaluate corrective actions taken to resolve apparent weaknesses.

The team recommended that the NRC maintain a normal inspection effort in this area.

5.2.3 Emergency Preparedness

The licensee implemented a formal self-assessment program in June 1995. The first assessment under this program, completed in October 1995, was one of the facility inventory program. Inventory control was an issue in the last two QA

audit reports, as well as the subject of an NRC violation. This self-assessment was appropriately critical, identifying 35 recommendations for improvement which were acted upon. The 1994 and 1995 QA audits identified other areas of potential weakness, most notably some missed training requirements by several ERO members and the trend of failure and corrective actions taken for the post accident sampling system (PASS). These audits were conducted by inspection teams, composed of people from NAECo, as well as Yankee Atomic and Northeast Utilities. However, audit findings were apparently closed out when the EP responses to the findings were accepted, instead of when all corrective actions were completed.

The team will review the corrective actions completed to assure audit findings have been resolved.

The team recommended that the NRC maintain a normal inspection effort in this area.

5.3 Quality of Plant Support

5.3.1 Radiation Protection

Overall performance in the radiation protection/radwaste areas appears to have been good and improving through licensee initiatives (e.g., enhanced access controls, radwaste minimization reviews, worker briefings, and pre-job planning) and increased attention to detail. Isolated problems have occurred as discussed above. Although a complete performance summary was not available, overall radiological controls performance for the most recent outage, based on preliminary data, was very good with most outage personnel exposure goals met. The licensee has also initiated shipment of radwaste for disposal.

The team will make an assessment of the quality of radiation protection support particularly as it relates to the most recent outage. The team will also assess the quality of the radwaste shipping program.

The appropriate level of NRC inspection effort in this area was indeterminate.

5.3.2 Security

Apparent strengths in this area were excellent management oversight and support, effective training evident by minimal personnel errors, and an informal self-assessment and audit program. Weaknesses in this area were the positive control of vehicles in the protected area, assessment aid concerns impacted by environmental conditions, and effective control of safeguards information.

The team will confirm the preliminary review findings.

The team recommended that the NRC maintain a normal inspection effort in this area.

5.3.3 Emergency Preparedness

Licensee ERO training, which required all members to participate in drills and exercises, was effective, as shown by good exercise performance. Drill and exercise critique items were effectively integrated into requalification training. Management support of the EP program appeared excellent. Facility inventory control was a recurring weakness, which was addressed through initiatives such as a new facility inventory manual. Overall, the quality of EP was very good.

The team will confirm adequate management support and reevaluate inventory control.

The team recommended that the NRC reduce inspection effort in this area.

5.4 Programs and Procedures

5.4.1 Radiation Protection

Strengths included establishment and implementation of an effective program to implement the revised 10 CFR Part 20. External and internal exposure controls appeared, with isolated exceptions, to be effective. Access controls and worker sensitivity to High Radiation Area access controls appeared to have improved but an additional example of worker non-adherence to High Radiation access control procedures occurred in December 1995. Also, changes to the ALARA program, in conjunction with an inadequate ALARA planning event (reactor head guide funnel inspection and repair) indicate potential weaknesses in ALARA planning. Further, it was not apparent that an effective program to monitor clean trash was in place. In addition, the licensee initiated shipment of radioactive waste to a licensed disposal facility. This latter activity has not been thoroughly reviewed by the NRC.

The team will assess the adequacy of radiation protection and radwaste programs and procedures.

The appropriate level of inspection effort in this area was indeterminate.

5.4.2 Security

A strength in this area was the timeliness in which procedures were revised and information disseminated to the security force once a problem was identified and effectively resolved. To enhance the effectiveness of the department, several members of security department have received training in the performance of root cause analysis so that issues can be further evaluated. However, a weakness in this area, was the timeliness in which potential weaknesses were identified or were determined to be issues.

The team will review the timeliness for identification and correction of potential weaknesses.

The team recommended that the NRC maintain a normal inspection effort in this area.

5.4.3 Emergency Preparedness

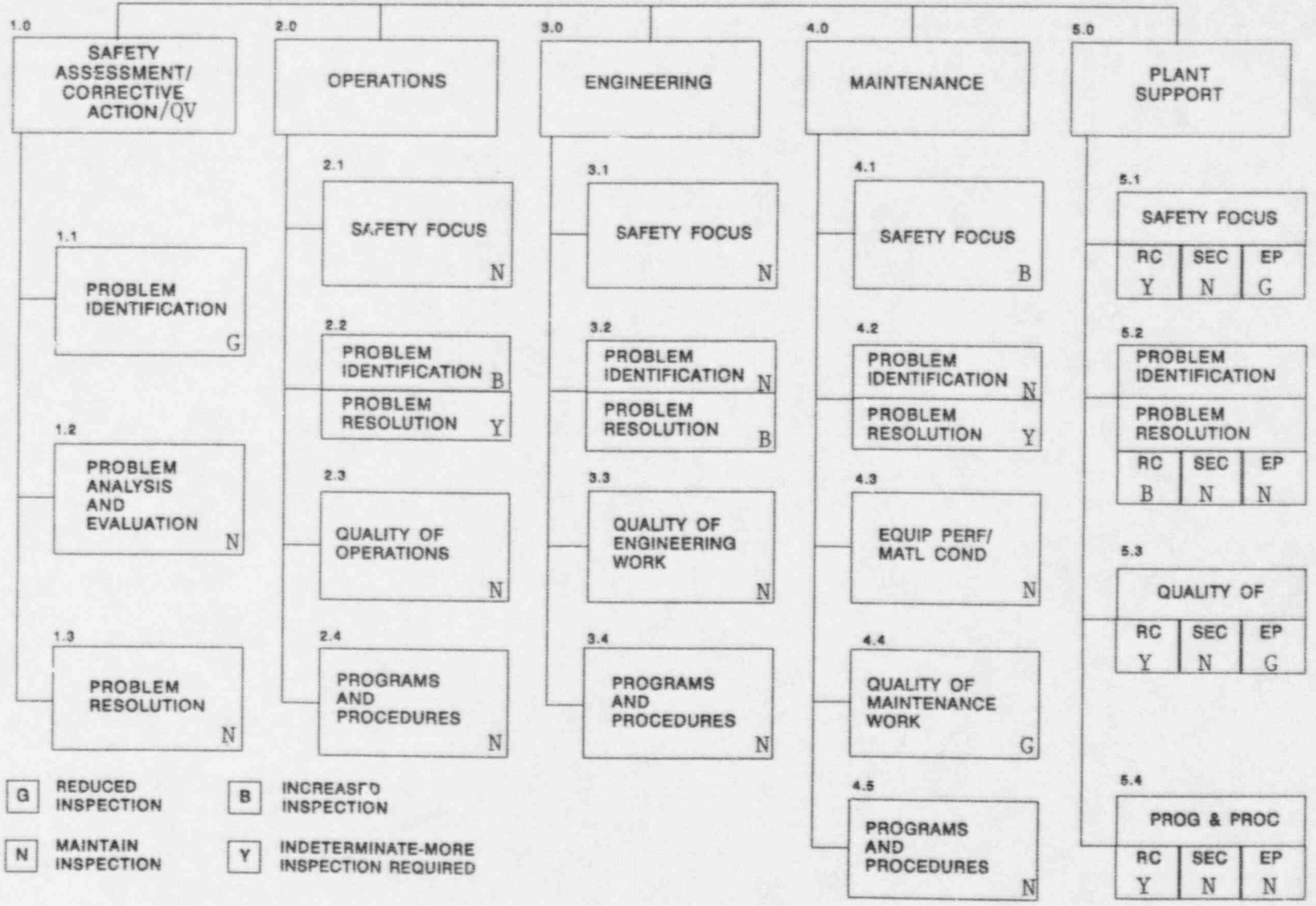
Emergency plan and procedure changes were thorough and well-documented. The licensee initiated a re-engineering of the emergency facility maintenance program and created the EP Facility Inventory Manual in response to a recurring weakness in facility inventory control. An effective mechanism exists to incorporate drill and exercise critique items into the training program. The EP audit program was effective, with audits conducted by strong, independent teams, and which meet regulatory requirements. A formal self-assessment program was initiated in June 1995, under which one assessment has been completed.

The team will evaluate additional assessments of the EP program.

The team recommended that the NRC maintain a normal inspection effort in this area.

ATTACHMENT 1

PERFORMANCE ASSESSMENT/INSPECTION PLANNING TREE



ATTACHMENT 2

DOCUMENTS AND INFORMATION REVIEWED IN-OFFICE

NRC Information

- NRC inspection reports for the current assessment period
- Licensee event reports for 1994 and 1995
- NRC performance indicators

Requested Information

- Corporate and Site Organization Charts
- Performance Indicator Report for Last Year
- Index of Corporate and Site Procedures
- Conduct of Operations Procedures(3)
- Conduct of Maintenance Procedures(3)
- Conduct of Engineering Procedures(3)
- Conduct of Radiation Protection Procedures(3)
- Operability Determination Procedures(3)
- Maintenance Work Control Procedures(3)
- Reportability Procedures(3)
- Modification Procedures(3)
- List of Special or Standing Orders Issued for Last Two Years
- List of Equipment Performance/Failure Trend Reports for Last Two Years
- Sample(1) of Equipment Performance/Failure Trend Reports
- List of Closed Work Requests, by System, for Last Two Years
- List of Open Work Requests, by System
- List of Completed Requests for Engineering Work for Last Two Years
- List of Open Requests for Engineering Work
- List of Modifications Implemented in the Last Two Years
- List of Modifications Canceled in the Last Two Years
- List of Modifications Approved but Not Implemented (Provide Schedule)
- List of Operability Determinations Performed in the Last Two Years
- Sample(1) of Recent Operability Determinations
- List of Reportability Determinations Performed in the Last Two Years
- Sample(1) of Reportability Determinations for Each Functional Area(2)
- List of Self-Assessments Performed in the Last Two Years
- Sample(1) of Self-Assessment for Each Functional Area(2)
- Copy of the SORC and NSARC Charters
- Sample(1) of Meeting Minutes for the SORC and NSARC for Last Six Months
- Sample(1) of NSARC Periodic Report
- List of Quality Assurance Audits Performed in the Last Two Years
- Sample(1) of Quality Assurance Audits for Each Functional Area(2)
- Root Cause Determination Procedures(3)
- List of Root Cause Determinations Performed in Last Two Years
- Sample(1) of Root Cause Determination
- List of Open and Closed Adverse Condition Reports for Last Two Years
- Sample(1) of Adverse Condition Report for Each Functional Area(2)
- List of Post Trip Review Reports
- Sample(1) of Post Trip Review Reports
- Sample(1) of Performance Reports to Site or Corporate Management

- Documents Describing Station Goals or/and Evaluating Seabrook Performance
- List of Equipment Tagging Orders for Last Two Years
- Copies of the Five Oldest Equipment Tagging Orders
- List of Operator Work Arounds
- Latest Complete Refueling Outage Critique
- Sample(1) of Corrective Action Request

(1) - Sample size should be determined by data available and document sizes.
(2) - Functional areas of interest are Operations, Maintenance, Engineering, Health Physics, and Security.
(3) - These requested procedures are only a few controlling documents.