U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Number:	50-213/92-14
Docket Number:	50-213
License Number:	DPR-61
Licensee:	Connecticut Yankee Atomic Power Company P. O. Box 270 Hartford, Connecticut 06141
Facility Name:	Haddam Neck Plant
Inspection At:	Haddam Neck, Connecticut
Inspection Conducted:	July 13 - 17, 1992

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Inspection Summary: Inspection from July 13 - 17, 1992, (Inspection Report No. 50-213/92-14)

Areas Inspected: An announced inspection was performed at the Haddam Neck Plant by two region-based inspectors to assess the licensee's corrective actions to address a violation of NRC requirements and additional weaknesses identified as a result of an NRC Maintenance Team Inspection (Inspection Report No. 50-213/90-80). In addition, follow-up inspection was performed of two unresolved items concerning procurement (UNR 50-213/89-200-05) and surveillance tracking (UNR 50-213/92-08-01).

Results: The inspection determined that the corrective actions taken to address a violation and several program weaknesses identified during the Maintenance Team Inspection were not fully effective. In addition to similar inspection findings, licensee corrective actions to the internal quality assurance work order and work control deficiencies have not been fully effective. For this reason, violation 50-213/90-80-01 will remain open.

A sampling review of the procurement program revealed good control over the dispositioning of vendor nonconformance reports and adequate measures to prevent nonconforming items from being used in the facility. Based on this additional information, Unresolved Item 50-213/89-200-05 is closed.

A sampling review of the licensee's surveillance tracking program revealed good short-term corrective actions to prevent recurrence of missed surveillances. However, an independent Human Factors evaluation was not complete at the time of this inspection, and no long-term corrective actions had yet been implemented. For this reason, unresolved item 50-213/92-08-01 will remain open.

As a result of this inspection, one violation and one unresolved item were opened. During inspection of the cable vault containing safety-related cabling, the inspector observed two open condulets, one with a bare cable end hanging out. Failure to identify the cable with a required label, cover the end with heat shrinkable tubing, and neatly tie back in accordance with ACP 1.0-35, Permanently Lifted Leads, Revision 1 Major, constitutes a violation of licensee procedures (VIO 50-213/92-14-01).

In addition, an unresolved item (UNR 50-213/92-14-02) was identified when an electrical safety-related box, also located in the cable vault, was found with a cover being held on by only two screws. A 1/2" to 3/4" gap was observed between the loosely fastened cover and the box creating potential for compromising channel separation as well as indicating a lack of control over the work of maintaining safety-related equipment. Other electrical boxes also were observed with missing hardware.

DETAILS

1.0 PERSONS CONTACTED

Attachment 1 provides a listing of persons contacted during the inspection.

2.0 SCOPE

The inspection was performed to review corrective actions taken for a violation and weaknesses identified during the Maintenance Team Inspection conducted at the Haddam Neck (HN) Plant, also referred to as Connnecticut Yankee (CY), from August 27 to September 21, 1990. In addition, follow-up inspection was performed of two unresolved items concerning procurement (UNR 50-213/89-200-05) and surveillance tracking (UNR 50-213/92-08-01). Attachment 2 provides a list of documents reviewed during this inspection.

3.0 FACILITY WALKDOWN

The inspectors walked down portions of the facility during the course of the inspection to observe housekeeping, general maintenance practices, and the material condition of the facilities. The reactor was operating at power during the course of this inspection.

Three locations were noted to have scaffolding that appeared to be inadequate relative to impact upon safety-related equipment in the event of a seismic occurrence. A scaffold in each emergency diesel generator (EDG) room was noted to be deficient in both horizontal and vertical restraints, i.e., bracing, that would prevent potential impact upon safety-related equipment. The scaffolds also had several planks that were not restrained to prevent vertical movement. At a third location (the bottom elevation of the cable vault), a scaffold was noted to have similar deficiencies as the scaffolds in the EDG rooms.

Licensee management stated that the cable vault scaffold was no longer needed and should have been removed. The licensee removed the cable vault scaffold during the inspection which was verified by the inspector on July 16, 1992. The licensee also initiated corrective action and installed adequate bracing and restraints on the scaffolds in the EDG rooms.

A review of the licensee's procedure ADM 1.1-126, Revision 7, Scaffolding Installation and Storage and Use of Ladders, found that the procedure was deficient in that it lacked guidance regarding the addressing and handling of seismic concerns. The licensee committed to address the procedural deficiency and did so on July 15, 1992, by generating and approving a Temporary Procedure Change to ADM 1.1-126. This procedure change requires, prior to scaffold erection around Category 1 equipment, an engineering review of the planned configuration of scaffolding in addition to a field inspection of the scaffolding after erection. The purpose of engineering involvement is to ensure adequacy of restraints to handle potential seismic impact loadings so as to not degrade the operability of safety-related equipment. The inspector concluded that this licensee action should resolve the inspector's scaffold concerns.

While in the EDG building, the inspector observed a sheet metal cover for a cable tray that was not attached to the cable tray and was lying on the cable. Rough-cut edges of the sheet metal were bearing on cable at an opening in the cover where the cable left the tray. The inspector inspected the cable where the sheet metal edge was bearing on the cable and found no apparent insulation damage. The inspector observed another sheet metal cover in the EDG building that was similarly missing any method of attachment. This installation deficiency appears to have existed for some time, and the inspector noted that this situation creates a potential to damage safety-related cable. The licensee committed to perform a plant-wide investigation and determine the corrective actions to be taken.

During inspection of the cable vault, the inspector observed a large (approximately 4 inch) electrical conduit with an open condulet with electrical cable hanging out. One of these cables was cut, with the bare lead exposed. There was no identification on this cable. The licensee's procedure ACP 1.0-35, Permanently Lifted Leads, Revision 1 Major, specifies that such leads be identified with a serial number and bare wires covered with heat shrinkable tubing and the lead be neatly tied back. Failure to identify the cut off cable with a serial number, cover the bare wire end with heat shrinkable tubing, and neatly tie back is a violation of the licensee's procedure (VIO 50-213/92-14-01). Another nearby electrical conduit was observed to have an open condulet with its cover attached by only one screw. This cover was hanging down and the enclosed cable was clearly visible.

While in the cable vault, the inspector observed electrical boxes that were missing cover fasteners, e.g., cap screws. The inspector selected to inspect in detail one large electrical box identified as No. 5. The cover of the box was observed to be pulled away at the top and had a gap of approximately 1/2" to 3/4" between the cover and the box. Only two screws attached the cover to the box. The inspector observed no gasket on this box; however, an adjacent similar box was observed to have a gasket. The inspector requested that the licensee provide drawings of the entire electrical box No. 5 installation. By the end of the inspection, the licensee had not yet been able to determine from any of the available drawings whether or not the box design required a cover gasket. A review of Drawing No. 16103-31153 Sh. 5, Revision 7 (labeled QA), showed the box contained safety-related channels A-1, A-2, B-3, and B-4. The channels were separated within the box by metal partitions. The inspector observed that the incorrectly installed cover had the potential to compromise the designed channel separation within the box. The licensee's management stated that they would initiate corrective action on a generic basis. The as-found condition of Electrical box No. 5 is an unresolved item pending a full determination of the design, the installation, and separation requirements for the box and internal cabling (UNR 50-213/92-14-02).

During walkdowns of other portions of the facility, the inspectors visually observed other electrical boxes and panels which were missing fasteners. Considering these deficiencies along with the items identified above, the inspector informed licensee management of a generic concern regarding the adequacy of the licensee's control over electrical work, including the adequacy of the licensee's own inspections and their attention to detail. A telecon from the Haddam Neck Unit Director on July 21, 1992, indicated that the licensee

is initiating a program effort to perform a plant-wide search for loose covers on cable trays and missing screws. In addition, engineers will search for permanently lifted leads. The search for lifted leads will not include opening each electrical cabinet but, instead, will be a cursory external search. These checks will be conducted in containment during the next refueling outage, scheduled to begin in May 1993. The Unit Director indicated that most of the material weaknesses found were the result of construction/modification work. As an interim corrective measure to improve the work order control process, all work orders related to modifications will be walked down prior to construction services turning over the completed packages to operations.

4.0 MAINTENANCE TEAM INSPECTION FOLLOW-UP

4.1 Violation

The violation listed below corresponds to the listing and numbering in the Notice of Violation. A brief synopsis of the violation is given, followed by the inspection findings.

(Open) Violation 50-213/90-80-01

The maintenance team inspection (MTI) conducted during August and September 1990, identified work order deficiencies during a review of over one hundred (100) completed mechanical, electrical, and I&C work orders. Deficiencies included such things as poor documentation and procedure deviations and items that related to the questionable work control practices. The MTI found that the licensee's own plant Quality Services Department (QSD) had conducted a review of 1989 work orders in CY-QSD-90-1117, dated February 2, 1990, and identified a large number of similar deficiencies. However, the licensee's actions to promptly correct these deficiencies had not been adequate at the time of the MTI in August and September 1990. The Notice of Violation stated that, "the licensee's measures established to assure that conditions adverse to quality are promptly corrected and corrective action taken to preclude repetition were inadequate..."

During this inspection, the inspector determined that the work order/work control (WO/WC) problem still existed. However, evidence existed that maintenance management was actively involved in taking corrective action steps to resolve WO/WC problems, including the hiring of additional personnel. The maintenance manager was found to be cognizant of the spectrum of WO/WC issues. The maintenance manager provided the inspector for review a number of completed WOs that he had recently identified with problems. For example:

WO CY 9106409	No. 3 Steam Generator (E-6-3) Blowdown Header Drain Isolation Problem Identified: Two welds were added after the approval process.
WO CY 9109122	A-Charging Pump (P-18-1A), Recirculation Orifice Bypass Throttle Valve CH-V-266

Problems Identified: Base material not clearly identified.
Weld data card indicated welds to be socket; however, W-7-10 is not a socket.
Scratch out under retest is not dated or clearly initialled.

The inspector reviewed Quality Services Department (QSD) reports for WO/WC problems and noted that surveillances conducted during the outage had identified problems. For example:

Report CY-QS-91-061 Preventive Maintenance on MCC-8
Problem Identified: No work order procedure at work site for activity being performed.

Report CY-QS-91-090 Review of Two AWOs: CY91-06415 AND CY91-06378
Problem Identified: Job scope expanded after pre-approval and ANI review.

QSD performed audit A 30189 during April 15, to June 19, 1992, and identified WO/WC problems, for example:

AWO work scope deviations
Incomplete Section XI plans
Missing inspection records from work packages
Incomplete weld data cards
Wrong welding process used

An interview with a QSD engineer/auditor indicated a number of WO/WC problems existed, for example, documentation deficiencies. Other perspectives provided by the auditor were that procedures were too voluminous to expect people to follow. The auditor said that people tend to get lost in the details and that there are so many people involved in the work order package, that people tend to get lost in the process.

A memorandum "Maintenance Team Inspection Follow" dated July 9, 1992, from the supervisor of assessment services to the maintenance manager provided an overview perspective of WO/WC problems going back to 1989, including issuance of a Corrective Action Request (CAR) on March 19, 1992. The inspector noted that the CAR gets upper level management attention in that the CAR is routed to the Executive Vice President of the company.

The inspector selected WO packages, listed in Attachment 2, that had been closed out and completed for review. The packages were selected from the CY 1991-1992 refueling outage time period. The outage ended March 15, 1992. The inspector reviewed 16 of the completed WO packages obtained from the licensee's official records file. Some packages

were complete and well reflected the work performed. However, the inspector noted a wide variation in the quality of the documentation. For other packages, it was not clear, based on the documentation, as to the work or testing that was performed. Some WO packages had incomplete steps, data entries, and signoffs. WO CY '92 02287 called for a repair of a body to bonnet leak on a valve; however, not only the valve repaired was tested, but another valve, not specifically included in the WO, was also tested. The WO testing intent was unclear and confusing since the procedure used to test the repaired valve also included the second valve which was not specifically delineated by the WO.

During an interview with the maintenance manager on July 16, 1992, the manager stated his intent to complete, by August 15, 1992, a personal interview with each maintenance supervisor, that will focus on improving maintenance documentation relating to WO/WC. The maintenance manager initiated a memorandum entitled, "Work Order Documentation Review Problems" to first-line supervisors on July 16, 1992. This Memorandum discussed WO/WC documentation deficiencies and stressed providing greater attention to detail.

Based upon the above interviews and inspection of documentation, the inspector concluded that corrective action to the violation cited by the 1990 MTI inspection was not fully effective. The inspector further concluded that, although the licensee's corrective action processes were involved, management interim corrective actions taken to date (July 17, 1992) were not fully effective to promptly correct the identified WO/WC problems. The violation 50-213/92-14-01 remains open pending the licensee taking effective corrective action and the licensee's assessment processes determining the adequacy of the corrective action.

4.2 Licensee Initiatives

The licensee has identified one of the causes for work control (WC) problems to be the cumbersome and hard to work administrative procedural process that over the years has received many interim fixes. The licensee's corrective action to improve the administrative processes (the Administrative Control Procedure (ACP) rewrite project) was initiated in October 1991, based upon an interview with the ACP rewrite supervisor. Intensive WC process improvement studies were under way, including determining how the company wants to control work. This effort is expected to reduce the complexity of the current WC process and produce an improved WC process. However, the realization of an ACP product for improving WC is a long term effort with little immediate benefit to correct the existing WO/WC problems. Evidence exists that the ACP rewrite project is getting active management involvement and resource commitment.

The Licensee's Maintenance Engineering Services has underway a project to develop a master plan for a Reliability Centered Maintenance (RCM) Program for all of the company's reactors. A pilot RCM is already underway at Millstone 1 and was stated to be 70% complete. A pilot RCM program will be started at HN for the condensate system by July 28, 1992, with the expected completion by the end of 1992. HN plans to use an Electric Powewr Research Institute (EPRI) "RCM Work Station" software package to

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document the evaluations. The RCM program is expected to provide a basis for HN to address the NRC's Maintenance Rule and provide an improved technical basis for performing maintenance at HN. The current projection is to complete the RCM for the major systems in a time frame of about four years which is timely with the effective date of the maintenance rule.

The licensee has not maintained the HN Material, Equipment Parts List (MEPL), and Bill of Materials (BOL). The licensee has initiated a contract with Nuclear Energy Services, Incorporated to complete a MEPL and BOL. The current completion estimate is September 1993 for Maintenance and October 1993 for the I&C Departments.

The HN site maintenance department is initiating organizational structure changes in order to bring the organization in line with the way it is being planned and intended to conduct future maintenance. Additional maintenance staff are being recruited to fill positions relating to work order planning and preparation.

The inspector concluded that the above initiatives appear to be well targeted to provide long term corrective action to the WO/WC problems as well as to bring overall improvement to the licensee's maintenance process.

5.0 PROCUREMENT

5.1 Procurement Program (38701) [1]

The inspector reviewed the licensee's program for procurement of safety-related material, equipment, parts (MEP), and services. Procurement document initiation is controlled by ACP 1.2-4.1, Procurement Document Preparation and Review, which was recently revised on July 1, 1992. For all purchase requisitions, the originator must determine the Nuclear Indicator (QA CAT 1, Non-QA, or Augmented Quality) for the item being purchased. For most items, the Nuclear Indicator can be found in the Production Maintenance Management System (PMMS) database. For those items not in the PMMS database, a Nuclear Indicator of "Unknown" is recorded. If the procurement is any category of QA or "Unknown," the applicable department manager is required to forward the requisition to the Procurement Engineering Group. A procurement engineer must verify the safety classification of all end uses of the item using the MEP List (MEPL), PMMS, and/or original design documents, as necessary. Any discrepancies between these sources must be resolved before proceeding with the procurement. The inspector had no questions regarding the adequacy for designation of quality classification of procurement items.

Procurement Quality Services (PRQS) is responsible for implementing the quality aspects of the procurement process, specifically, ensuring that the suggested supplier can meet the

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[1]Inspection Procedure Reference

Quality Assurance program requirements of the requisition This process includes verifying that the supplier is on the Approved Supplier List (ASL) which is a listing of those vendors/suppliers who have and implement appropriate Quality Assurance programs in accordance with the requirements of 10 CFR 50 Appendix B, ANSI N45.2 and 10 CFR 21. This process is accomplished by use of the licensee's Quality Assurance Supplier Information Program (QASIP) which is a computer tracking program which is used for tracking supplier-related procurement activities. This program provides a computerized method for control and accountability of the status of suppliers and provides a convenient means of listing the performance history of those suppliers. In instances where an audit, survey, or source inspection is required for procurement from a supplier, PRQS is responsible for initiating the process of scheduling an audit, survey, or source inspection. When a requisition is written to a distributor not on the ASL for items provided by a supplier, the order is written to the supplier, c/o the distributor, with the statement, "Ship Direct from the Manufacturer" in the body of the requisition. Supplier status (approved versus unapproved), per the ASL, is placed on the manufacturer rather that the distributor.

PRQS is also responsible for receipt inspection of procured items in accordance with QSD 3.08, Performance of Receipt Inspection Activities. The receipt inspection process begins with PRQS generating a Material Receiving Inspection Report (MRIR) package which documents the status of received material, equipment, and parts. The MRIR package contains the applicable procurement documentation required by the project specification, purchase order, or Contract Document Plan. QSD 3.08 thoroughly desc s the expectations of receipt inspectors and provides specific requirements for when nonconformance reports (NCR) shall be initiated. The inspector noted that the reporting requirements in QSD 3.08, as evidenced by the NCRs reviewed, have a very low threshold and provide adequate defense against the use of nonconforming materials in the plant. Interviews with receipt inspectors revealed a good knowledge of the expectations of QSD 3.08 and a conservative attitude with respect to initiating NCRs.

The inspector concluded that adequate measures were in place to assure that items are procured with a level of quality commensurate with their safety-related application.

5.2 (Closed) Unresolved Item 89-200-05

Unresolved item 89-200-05 raised a concern as to whether Northeast Utilities Service Company (NUSCo) or its designee, Bechtel Power Corporation (BPC), are adequately controlling deviations and nonconformances which are identified during procurement activities. The specific concern is that BPC Supplier Deviation Disposition Requests (SDDRs) may be closed out on the basis of a BPC Acceptance Signature alone, even though the deviations have not been completely or adequately dispositioned. The SDDRs fall into two categories: those in which BPC engineering accepted the vendor disposition, and those in which it did not.

An example of the first category was SDDR E-518-2, in which the vendor of a safety-related motor control center (MCC), in effect, recommended acceptance of a nonconforming condition as-is. The vendor stated that, contrary to the purchase order (PO) requirement that a Certificate of Conformance (C of C) be supplied, certified material reports for any electrical material other than bus supports, bus barriers, and bus insulators could not be obtained. BPC apparently accepted this indeterminate, nonconforming condition without documenting an analysis of the possible adverse affects on safety or justification for acceptability of the material without the required certifications. SDDR E-518-2 was submitted by Nutherm. SDDR E-518-2 was reviewed and accepted by BPC on the basis that the deviation identified would not affect the properties or functions of the MCCs in question. All qualification requirements per IEEE 323-1974, IEEE 344-1975, IEEE 383-1974, and IEEE 649-1980) for the MCCs and sub-assemblies, were met, as documented in Equipment Qualification Report BPC-2475R. The inspector reviewed BPC 2745 and found that it contained a Certificate of Compliance to IEEE 323-1974, 344-1975, and 649-1980. The qualification process used appeared to be adequately comprehensive to ensure that the MCCs would withstand the specified environmental conditions and seismic loadings without loss of function or structural integrity. BPC-2475R was generated May 26, 1988, prior to the installation of the MCCs at Haddam Neck, and adequately justified use of the MCCs in safety-related applications.

A HN Plant NCR was not generated for this SDDR because of a unique disposition convention used by BPC called, "Modify Bechtel Requirement." QSD 3.08 requires that receipt inspectors initiate a HN NCR for supplier NCRs which have been dispositioned "Use-As-In" or "Repair," but no guidance was given for the, "Modify Bechtel Requirement" category. Interviews with receipt inspectors revealed that, currently, all vendor NCRs, regardless of disposition, result in the initiation of a HN NCR. The inspector reviewed MRIR packages from the last six months and found that all vendor NCRs did indeed result in a HN NCR.

Examples of the second category include SDDRs for which the vendor disposition was rejected by BPC engineering, but the SDDR was still "accepted" by BPC signatures. Examples of these include: SDDRs E-554-13 (unmarked field wires found on a constant voltage transformer), E-554-14 (poor workmanship in SOLA transformer splices, i.e., solid wire leads used solder only for splices), E-554-15 (invertor IEEE-650 documentation requirements not met), and E-554-8 (vendor tests of invertor indicating efficiency less than PO specification). The BPC disposition appeared to be a recommendation rather than a requirement that the vendor comply with the specifications. Correspondence with BPC revealed that BPC signatures are required for both "Accepted" and "Rejected" dispositions of SDDRs. The BPC acceptance signatures indicate that the BPC disposition (Accept/Reject) and the justification statement have been reviewed and approved by the responsible Engineering Group Supervisor and the Project Engineer. These signatures do not indicate BPC's acceptance or rejection of the supplier's proposed disposition. This is indicated in the box labelled, "Bechtel Engineering Action" by checking one of the two boxes labelled, "Accepted" or, "Rejected." Interviews with PRQS personnel verified that this was indeed the

understanding of the PRQS group. BPC's internal procedure has been revised to change the heading from, "Bechtel Acceptance Signature" to, "Bechtel Signature" to prevent future confusion. In addition, BPC considers SDDRs unacceptable until approved by BPC engineering in writing. In general, equipment is not released for shipment until all SDDRs relating to that equipment have been dispositioned and actions required by a disposition are completed. These actions adequately provide multiple barriers to prevent nonconforming materials from being used in the facility.

Based on the additional information provided by the licensee, unresolved item UNR 89-200-05 is closed.

6.0 SURVEILLANCE TRACKING, (Open) Unresolved Item 92-08-01

On February 12, 1992, the operations department identified that procedure SUR 5.1-154, Fire Protection Equipment and Fire Hazard Monthly Inspection, was not performed within the monthly required interval of Technical Specifications 4.7.6.5.a and 4.7.6.6.a. The surveillance was initially scheduled for the week of January 9; however, it was not performed until February 12, when the oversight was discovered. The surveillance was satisfactorily performed on that date, with no deficiencies noted.

CYAPCo attributed the cause of the event to personnel error in the control and tracking of surveillances. Since October 1990, five reportable events involving missed surveillances have occurred. The surveillances involved fire protection activities, radiation monitors, and the EDGs. Unresolved item 92-08-01 was opened to evaluate the licensee's corrective action to prevent recurrence of missed surveillances.

The licensee has initiated an independent evaluation by Human Factors personnel to provide a comprehensive audit of the surveillance tracking programs currently in place so as to create a single site-wide computerized surveillance tracking system. This tracking system will either be incorporated into the licensee's PMMS database or will be part of a independent engineering local area network (LAN). Pending a decision on funding, a PMMS-based system would require one to two years for implementation. An independent LAN system would take approximately eight months to implement. UNR 92-08-01 is left as open pending a review of the licensee's program after implementation.

The inspector reviewed the interim measures in place to prevent recurrence of missed surveillances. The licensee initiated a management directive which requires all groups who perform Technical Specification required surveillances to audit their tracking programs to see what improvements can be made. Individual groups are meeting to discuss improvements and any missed surveillances are discussed at the Plan of the Day meeting to share lessons learned.

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The inspector reviewed the tracking programs of the maintenance, engineering, instrumentation & control (I&C), and operations departments. The improvements to tracking systems fell primarily into three categories:

1. **White Boards**: The inspector observed that all departments are currently using some form of "white board" for surveillance tracking. The white board provides a visual representation of all surveillances required to be performed. If a surveillance is missed, it will be visually apparent to anyone looking at the board. In addition, the Operations and I&C Departments use colored flags on the white board to indicate those surveillances which are scheduled to be performed in the current week which provides a warning to a missed surveillance.

2. **Independence:** The inspector observed increased use of double verifications of data recorded, elimination of single sources of information where possible, and increased auditing of data. For example, in the operations department, auditing of the data recorded on the "white board" occurs weekly now as opposed to monthly. In addition, the board is now audited by two parties instead of one. There has also been a trend towards placing a step in surveillance procedures to require that the surveillance tracking system be updated upon completion of the procedure.

3. **Conservatism:** The inspector noted that the licensee is being conservative with respect to scheduling surveillances. Examples of this include I&C performing monthly surveillances on a four-week schedule and engineering using a schedule date for quarterly surveillances that is generated using the earliest surveillance done last quarter. These changes have reduced the paperwork burden associated with the scheduling of surveillances and, thus, make tracking easier and reduces the chance of a surveillance being missed.

Interviews with personnel from the involved departments revealed that there is a culture now present which stresses that surveillances will be performed on schedule, as opposed to allowing use of the 25% extension window. In addition, there appears to be increased accountability for missed surveillances. Engineering department personnel are rated on a scale of one to five for quality of work performed and meeting of surveillance schedules. The numbered scale of the rating system provides a method to trend declining performance before a surveillance is actually missed. The inspector considered this a good initiative.

Overall, the inspector found the licensee's short-term corrective actions to be adequate. However, this item will remain open pending review of the licensee's independent evaluation results and long-term corrective actions.

7.0 MANAGEMENT MEETINGS

The station management was informed of the purpose and scope of this inspection during an entrance meeting conducted on July 13, 1992. Personnel listed in Attachment 1 were

interviewed throughout the inspection, and updates of inspector concerns were periodically provided to station management. The results and conclusions of this inspection were presented to station management during an exit meeting conducted on July 17, 1992.

Attachments:
1. Persons Contacted
2. Documentation Reviewed

ATTACHMENT 1

Persons Contacted

Connecticut Yankee Atomic Power Company (CYAPCO)

J. Beauchamp, Supervisor, Site QSD
R. Beganski, Maintenance Engineer
R. Brown, CY Representative
* G. Bouchard, Unit Director
R. Caminati, Maintenance Supervisor
D. Delacruz, Auditor, Assessment Services, QSD
J. DeLawrence, Engineering
M. Derring, Site Engineer
* J. LaPlatney, Operations Manager
* P. L'Heureux, Mechanical Engineering Supervisor
* T. McDonald, Maintenance Manager
* T. Nichols, Maintenance Engineer
* J. Staniord, Instrumentation and Controls Manager
* J. Stetz, VP Station
* G. Tylinsky, Electrical Engineering Supervisor
G. Winters, Maintenance Supervisor

Northeast Utilities Service Company (NUSCO)

* E. Annino, Senior Licensing Analyst
G. Closius, QSD Supervisor
* L. Ferenchik, Gen/Const Representative
T. Galloway, Engineer, Maintenance Engineering Services
K. Higgings, Lead Engineer, Maintenance Engineering Services
* W. Kadler, Generation Test Supervisor
B. Place, Head, ACP Rewrite Program
R. Rogozinsky, CY Procurement Engineering Supervisor

Nuclear Regulatory Commission (NRC)

* P. Habighorst, Resident Inspector
W. Raymond, Senior Resident Inspector

During the course of this inspection, the inspectors contacted other members of the licensee's Operations, Maintenance, Quality Services, and Training staffs.

* Denotes present at exit meeting held on July 17, 1992.

ATTACHMENT 2

Documentation Referenced

PROCEDURES

ACP 1.0-35, Revision 1 Major, Permanently Lifted Leads

ACP 1.0-44, Revision 1, Implementation of the Production Maintenance Management System (NOP-2.13)

ACP 1.2-4.1, Revision 26, Procurement Document Preparation and Review

ACP 1.2-5.1, Revision 42, PMMS Trouble Reporting System and Automated Work Orders

ACP 1.2-6.5, Revision 31, Station Procedures

ACP 1.2-15.1, Revision 22 Major, Nonconformance Reports

DM 1.1-126, Revision 7, Scaffold Installation and Storage and Use of Ladders

MA 1.5-1, Revision 6, Work Order Preparation, Work Control and Documentation

MDI-78, Revision 5, Technical Specification Surveillance Tracking

NEO 6.05, Revision 3, Processing and Control of Purchased Material, Equipment, Parts, and Services

NEO 6.12, Revision 3, Evaluation of a Replacement Item

ODI-73, Revision 50, Schedule of Control Room Routine Activities, Tests and Checks

QSD 3.08, Revision 6, Performance of Receipt Inspection Activities

CORRESPONDENCE AND RECORDS

Bechtel Response to Unresolved Item 50-213/89-200-05, July 5, 1989

Equipment Qualification Report for Cutler-Hammer Motor Control Centers, Nutherm Ref. No. BPC-2475R, Rev. 1, May 26, 1988

Memorandum. D. A. Hitchcock to J. F. Opeka dated May 26, 1992, Minutes of CY NRB Regular Meeting #92-7, May 14, 1992

Memorandum, D. O. Nordquist to J. P. Stetz dated June 4, 1992, Corrective Action Request 92-02, Connecticut Yankee Work Process Control

Memorandum, G. H. Bouchard to D. O. Nordquist dated May 22, 1992, Corrective Action Request 92-02, Connecticut Yankee Work Control Process

Memorandum, G. J. Closius to D. O. Nordquist dated March 19, 1992, Corrective Action Request Connecticut Yankee Work Process Control

Memorandum, G. J. Closius to T. J. McDonald dated July 9, 1992, Maintenance Team Inspection Follow-up

Memorandum, T. J. McDonald to M. Bain dated July 14, 1992. NRC Maintenance Team Follow-up Inspection

Memorandum, A. K. Higgins to M. J. Haeflich dated April 28, 1992, Pilot Reliability Centered Maintenance Program for Connecticut Yankee Condensate System

Memorandum, J. Beauchamp to J. Stetz dated May 2 1991, Procedure Compliance at CY

Memorandum, T. J. McDonald to Maintenance Department First Line Supervisors dated July 16, 1992, Work Order Documentation Review Problems

WORK ORDERS

Independently Selected And Reviewed By The Inspector

CY 89 12680
CY 92 02287
CY 91 10458
CY 91 12097
CY 91 07106
CY 88 05675
CY 91 09273
CY 91 00718
CY 92 02285
CY 91 13133
CY 89 13142
CY 91 08779
CY 91 10503
CY 91 10825
CY 90 07319
CY 89 10180

Reviewed To Assess Problems Identified By The Licensee

CY 91 12446
CY 91 09122
CY 91 06410
CY 91 06409
CY 91 06412
CY 91 09122