U. S. NUCLEAR REGULATORY COMMISSION **REGION I**

Docket No.:	50-293	
Report No.:	50-293/91-29	
Licensee:	Boston Edison Company 800 Boylston Street Boston, Massachusetts 02199	
Facility:	Pilgrim Nuclear Power Station	
Location:	Plymouth, Massachusetts	
Dates:	November 12 - December 31, 1991	
Inspectors:	 J. Macdonald, Senior Resident Inspector A. Cerne, Resident Inspector D. Kern, Resident Inspector A. Finkel, Senior Reactor Engineer E. King, Physical Security Inspector 	
Approved by:	Rogge Chief, Reactor Projects Section 3A	1/21/42 Date

C. Rogge, Chief, Reactor Projects Section 3A

Date

Inspection Summary:

Areas Inspected: Safety inspection of plant operations, radiological controls, maintenance and surveillance, emergency preparedness, security, safety assessment and quality verification, and engineering and technical support.

Results: Inspection results are summarized in the Executive Summary.

EXECUTIVE SUMMARY

Pilgrim Inspection Report 50-293/91-29

<u>Plant Operations</u>: Routine plant operations observed during this inspection period were properly planned and were conducted in accordance with license requirements. Operations staff response to a partial Group 6 Primary Containment Isolation System initiation on December 21, 1991 was prompt and conservative. Immediate actions to fully isolate the Reactor Water Cleanup system and investigate the valve closures and pump trip were timely and consistent with procedural direction. Notification to the NRC was provided in accordance with regulatory requirements. Even though troubleshooting and analysis subsequently indicated that an Engineered Safety Feature actuation had not actually occurred, overall licensee actions were determined to have been appropriate for the initial event response.

<u>Radiological Controls:</u> Plant management tours of radiologically controlled areas were thorough and displayed an aggressive approach to maintaining personnel radiation exposure as low as reasonably achievable. Overall radiological conditions and controls were appropriate.

<u>Maintenance and Surveillance</u>: The discovery by the operators on shift of a RWCU system piping leak, prior to the initiation of a RWCU isolation signal, represented an example of good operations staff awareness both of existing plant conditions and of the potential for the occurrence of system anomalies. The overall licensee response, in developing both short and long term action plans, also exemplified effective coordination among various site departments. Communications with the NRC, both telephonic and written, provided evidence of an appropriate safety perspective.

Emergency Preparedness: The annual exercise was conducted on December 12, 1991.

<u>Security</u>: On December 3, 1991, a licensed operator tested positive for alcohol during random fitness for duty (FFG) testing. Management response to this event was aggressive.

Safety Assessment and Quality Verification & Engineering and Technical Support: Licensee event reports were well documented and consistent with reporting criteria.

Additional testing, analysis, and hardware modifications to the Peactor Core Isolation Cooling (RCIC) system were performed in order to restore RCIC to an operable status. The basis for the determination of operability was thoroughly reviewed and the determination of operability was appropriate. A testing plan to support long term assessment of battery charger performance was in progress.

Inspector review of the seismic design of the Residual Heat Removal (RHR) area ventilation ductwork verified adequacy to provide component structural integrity and to support safety-related equipment operation during design basis plant conditions.

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DETAILS

SUMMARY OF FACILITY ACTIVITIES 1.0

At the start of the report period Pilgrim Nuclear Power Station was in cold shutdown, completing a short maintenance outage which followed the October 30, plant shutdown.

On November 19, the Reactor Core Isolation Cooling (RCIC) system was declared operable following detailed testing, analysis and hardware modifications involving the RCIC inverter.

On November 21, reactor startup was performed and 100 percent power was achieved on November 24.

On December 16, a pinhole leak was observed in the Reactor Water Cleanup (RWCU) system piping downstream of the regenerative heat exchanger. The RWCU system was isolated due to increased leakage on December 18.

On December 18, the electric fire pump was declared inoperable due to the failure of a contactor associated with the automatic start feature of the pump upon sensing fire water header low pressure. A temporary modification was installed to bypass the automatic start controller and permit manual start of the fire pump. The diesel fire pump remained operable. A plan for repair of the electric fire pump was submitted to the NRC in accordance with Technical Specification (TS) requirements.

On December 20, an mechanical clamp device was installed on the RWCU piping leak and the system was returned to service. Leakage detected from the clamp on December 23, resulted in manual isolation of the system. The vendor representatives and licensee maintenance department personnel modified and drilled the clamp to accept a leak sealant compound. Leak sealant was injected and on December 27, the RWCU system was returned to service.

On December 30, inclement weather caused heavy marine debris fouling of the intake structure traveling screens. Power was reduced to 60 percent for main condenser backwash and some minor maintenance activities. Power was restored to 100 percent on December 31.

2.0 PLANT OPERATIONS (71707, 40500)

2.1 Plant Operations Review

The inspector observed plant operations during regular and backshift hours of the following areas:

Control Room Reactor Building Diesel Generator Building Turbine Building Switchgear Rooms Security Facilities

Fence Line (Protected Area) Screen House

Control room instruments were observed for correlation between channels, proper functioning and conformance with Technical Specifications. Alarms received in the control room were reviewed and discussed with the operators. Operator awareness and response to these conditions were reviewed. Operators were found cognizant of board and plant conditions. Control room and shift manning were compared with Technical Specification requirements. Posting and control of radiation, contamination and high radiation areas were inspected. Use of and compliance with radiation work permits and use of required personnel monitoring devices were checked. Plant housekeeping controls, including control of flammable and other hazardous materials, were observed. During plant tours, logs and records were reviewed to ensure compliance with station procedures, to determine if entries were correctly made and to verify correct communication of equipment status. These records included various operating logs, turnover sheets, tagout and lifted lead and jumper logs. Inspections were performed on backshifts including November 12-15, 25, 29, and December 2, 6, 9, 11, 12, 16, and 31. Deep backshift inspection was performed on December 7 (9:00 am - 2:00 pm) and December 15 (2:00 - 3:00 pm).

Pre-evolution briefings were noted to be thorough with appropriate questions and answers. The operators appeared to have good knowledge of plant conditions. No unauthorized reading material was observed. Food, beverages and hard hats were kept away from control panels.

2.2 Reactor Water Cleanup System Isolation

On December 21, 1991, the "A" reactor water cleanup (RWCU) pump tripped because of what appeared to be a partial Group 6 Primary Containment Isolation System (PCIS) actuation with closure of one RWCU system suction line outboard containment isolation valve (MO-1201-5) and the RWCU system discharge line outboard containment isolation valve (MO-1201-80). The suction line inboard containment isolation valve (MO-1201-2) had not closed upon initiation of this event, but was subsequently closed by operator action. Investigation by the operations staff on shift, initially using a remote video monitor to inspect the area, indicated an "A" RWCU pump seal leak. Subsequently, direct inspection revealed that the leak had been caused by a cyclone separator line failure at a threaded connection to the pump seal cavity.

While the RWCU system is not safety related and its operation is not required for powe: operation or any direct Technical Specification (TS) action, the initiation of the Group 6 PCIS was considered an engineered safety feature (ESF) actuation, which was reported to the NRC via the Emergency Notification System within four hours of the event initiation in accordance with 10 CFR 50.72(b)(2)(ii). A tracking Limiting Condition for Operation (LCO) (T91-310) was opened to sample reactor water chemistry in accordance with TS 3.6.B limits with the RWCU system isolated. An active LCO (A91-317) was then initiated to conduct troubleshooting activities on area temperature instrumentation and circuitry in proximity to the RWCU pump seal leak, such that the cause of the Group 6 PCIS initiation could be identified. A Failure and Malfunction Report (F&MR) (91-529) was also issued to address the event assessment and corrective action.

Subsequently, licensee testing of all suspect RWCU isolation instrumentation identified that a temperature element (TE-1291-12B) associated with a high temperature at the outlet of the non-regenerative heat exchanger in the RWCU system caused the system isolation. This determination was consistent with the observation that only valves MO-1201-05 and -80 had closed, since these valves receive their isolation signal from the temperature switch (TIS-1291-13B) aligned with the above temperature element. The switch itself was found to have an actuation setpoint lower than the 140 degrees designed to protect the RWCU filter demineralizer resin from damage due to elevated temperatures. Thus, the "A" RWCU pump leak had created a condition of increased RWCU flow, leading to a higher system temperature which caused a spurious isolation of the system.

Furthermore, since the isolation signals associated with the temperature elements (e.g., TE-1291-12B) designed to protect the demineralizer resins do not represent valid containment isolation signals, the licensee determined that an ESF actuation had not been observed and consequently telephonically withdrew its previous 10 CFR 50.72 notification to the NRC. On December 23, 1991, after calibration and functional testing of the safety related RWCU temperature instrumentation was successfully performed, LCO's T91-310 and A91-317 were both cleared and the RWCU system was returned to service. (See section 4.1 of this report for discussion of a subsequent RWCU isolation caused by leakage past a clamp installed to temporarily repair a thru-wall evacked piping condition.)

The inspector reviewed the co.r pleted LCO forms (T91-310 and A91-317) and both F&MR 91-529 and its reportability evaluation performed by PNPS Compliance Division personnel. Procedure 8.M.2-1.2.2 was checked to confirm the adequacy of testing the RWCU area temperature sensors, for valid PCIS Group 6 isolation, prior to returning the RWCU system to service. The inspector also reviewed the Updated FSAR, sections 7.3.4.7 and 8 along with Tables 7.3.1 and 2, to verify the validity of the licensee conclusion that the subject RWCU isolation did not constitute an ESF actuation.

The inspector determined that licensee withdrawal of its reportability of this event was valid and that sufficient system troubleshooting and evaluation had been performed by the licensee technical staff to diagnose the cause of the event and adequately address the required corrective measures for system operability. The inspector identified no unresolved safety issues or concerns related to the proper functioning of the PCIS associated with the RWCU system, components, and instrumentation.

3.0 RADIOLOGICAL CONTROLS (71707)

The inspector reviewed radiological controls in place as well as the radiological conditions of selected areas of the plant. In particular, during a walkdown of the Core Spray system, the inspector surveyed the conditions of the torus room and both residual heat removal (RHR) quadrants. No discrepancies were noted between the survey postings for these areas and the radiological conditions noted by the inspector. Plant management tours of radiologically

controlled a eas were thorough and displayed an aggressive approach to maintaining personnel radiation exposure as low as reasonably achievable. Overall radiological conditions and controls were appropriate.

4.0 MAINTENANCE AND SURVEILLANCE (37828, 61726, 62703, 93702)

4.1 Reactor Water Cleanup System Leak Repair

On December 16, 1991, a small leak was discovered in the reactor water cleanup (RWCU) piping between the first two stages of heat exchangers (i.e., between E-208A and E-208B) of the regenerative heat exchanger located in the reactor building downstream of the outboard containment isolation valve for the RWCU suction piping. This leak was identified by operations personnel during a routine swing-shift plant tour by viewing a remote video camera installed in the RWCU heat exchanger room. The use of the remote video equipment allows operators to monitor conditions inside a high radiation area while minimizing personnel exposure to radiation. While the RWCU system is designed to automatically isolate the system upon high system flow conditions. Such an automatic isolation, if it had occurred, would have represented an Engineered Safety Feature (ESF) actuation, related to a Primary Containment Isolation System (PCIS) Group 6 actuation. (See section 2.2 of this report for discussion of a similar, but unrelated event.)

The next shift (i.e., the mid-shift of December 17, 1991)the RWCU system was isolated by open tor action and a tracking limiting condition for operation (LCO) (T91-306) was initiated to sample reactor water chemistry daily. If the coolant chemistry limits of the Technical Specifications (TS) could not be maintained with the RWCU system isolated, an orderly shutdown of the reactor, in accordance TS 3.6.B.5, would be required.

The inspector attended licensee site technical staff briefing and coordination meetings to review the available options for the piping leak repair and restoration of the RWCU system to service. It was noted that the licensee evaluations appropriately considered the timeliness of various options with regard to reactor water chemistry concerns; the availability of historical information, to include welding and nondestructive examination data on the leaking pipe; the applicability of NRC Generic Letter 88-01 with respect to the possibility that Intergranular Stress Corrosion Cracking (IGSCC) was determined to be the failure mechanism; and work control and ALARA constraints for repair activities in a high radiation area. Initial identification of the exact location of the leak (i.e., in the heat affected zone of a elbow-to-pipe weld) was subsequently followed up by ultrasonic testing to size the entire flaw and the through-wall crack portion.

On December 19, 1991, site and nuclear engineering division personnel conducted a telephone conference with Region I and the Office of Nuclear Reactor Regulation to discuss licensee plans for both interim and final corrective action for the pipe leak. The first stage of the licensee two stage approach to repair activity consisted of installation of a temporary friction clamp to the

exterior of the pipe to stop the leak. This would allow for the return of the RWCU system to service while conducting material procurement and planning for the second stage of repair; i.e., replacement of the subject piping with material resistant to sensitization and the resultant IGSCC problems. During the period of time the temporary clamp would be in place, the licensee planned remote monitoring of the leak area at least once per shift. It was also noted during the telephone conference that the subject piping in the RWCU system was not safety related and would be automatically isolated from the primary system by a PCIS, Group 6 actuation signal.

As a result of NRC questions, the licensee conducted additional review and inspection activities related to the motor operated containment isolation valves and documented, in a letter to the NRC dated December 24, 1991, the reasons that automatic isolation of RWCU system, given an assumed clamp failure, would protect the reactor coolant pressure boundary. Attached to this licensee letter (BECo 91-154) regarding the RWCU repair were a description of the proposed temporary repair clamp, manufactured by AEA O'Donnell, Inc., and an evaluation of the crack growth and projected stability of the weldment for which the clamp would service as the temporary leak repair mechanism. Based upon supporting vendor calculations, licensee engineering personnel determined that if the permanent replacement of the degraded piping could be implemented within twelve weeks of temporary clamp installation, the crack stability criteria, governed by ASME Section XI requirements, would be maintained conservatively within operable limits.

The inspector reviewed the vendor calculations, along with Temporary Modification TS-91-63 through revision 2, to evaluate the acceptability of the licensee safety evaluation for the planned repair activities. On December 20, 1991, the clamp was installed, the piping was leak-tested, the RWCU system was restored \Rightarrow service and LCO T91-306 was cleared. The inspector evaluated the testing conditions a spot-checked the boundary valve lineup for pressure testing of the temporary clamp insta¹ \Rightarrow on, prior to restoration of the RWCU system to operable service. Subsequently, on sember 23, 1991, a leak in the pipe clamp assembly necessitated re-isolation of the RWCU system (LCO T91-311) and replacement of a gasket. The RWCU system was restored the following day; however, on December 25, 1991, another leak was observed, requiring re-isolation of RWCU (LCO T91-312). With the concurrence of the vendor, the temporary clamp was modified (reference revision 2 of Temporary Modification 91-63) to install metallic "O" rings in the place of a rubber seal with an additional capability to inject sealant into the clamp's contour ring assembly to provide a tight seal. This work was completed and the RWCU system was restored to service on December 27, 1991 with LCO T91-312 cleared the following day.

As of the end of this inspection report period, the RWCU system remained operable with licensee contingency for additional leak sealant inject in into the modified clamp assembly provided to stop any future RWCU leaks from the identified cracked piping.

NRC inspection continues to monitor the effectiveness of the temporary modification and the increased operator attentiveness to RWCU system leak tightness and integrity. The inspector also reviewed previous licensee responses to NRC Generic Letters (GL) 88-01 on IGSCC in

BWR piping and 89-10 on motor operated valve testing, relative to the licensee position that the RWCU isolation valves are capable of closing against a differential pressure provided by a postulated guillotine pipe break outs de containment. The licensee indicated in its December 24, 1991 letter to the NRC that diagnostic testing of two redundant isolation valves, coupled with the bypassing of the torque cutout switch for 98% of the closing stroke, assures RWCU system isolation per design, given any future clamp failure and assumed pipe break. Additionally, the stems of two RWCU isolation valves, outside containment, were lubricated to minimize any friction adversely working against design valve closure. With regard to GL 88-01, the inspector reviewed a supplemental licensee response to an NRR evaluation (TAC No. 69153), dated November 15, 1990. This letter documented the licensee commitment for the replacement, during subsequent refueling outages, of all of the RWCU system piping outside of the containment isolation valves with material not susceptible to the IGSCC failure mechanism. While some of this piping had been replaced during Refueling Outage No. 8 based upon inservice inspection (ISI) results, the inspector noted that the cracked section of piping currently leaking, had not been inspected previously or selected for ISI based upon the approved licensee sampling plan.

The inspector had no questions regarding licensee commitments or plans relative to the RWCU system piping leak repairs. Given the licensee safety evaluation, the design capability to iselate the degraded non-safety portion of the RWCU system, and the measures taken to conduct both short-term repairs while planning for long-term pipe replacement, the inspector identified no unresolved safety issues or concerns related to these licensee corrective action and maintenance activities.

5.0 EMERGENCY PREPAREDNESS (40500)

A full scale emergency preparedness exercise was conducted on December 12, 1991. Various state and local officials participated in the exercise which was evaluated by both NRC and Federal Emergency Management Agency (FEMA) personnel. A full evaluation of licensee performance can be found in NRC inspection report No. 50-293/91-28.

0.0 SECURITY (71707)

6.1 Fitness For Duty

On December 3, 1991, a licensed senior reactor operator tested positive for alcohol during a random test, performed as part of the licensee fitness for duty (FFD) program. The NRC was notified in a timely manner. The operator had been performing licensed duties in the control room as Nuclear Operations Supervisor (NOS) immediately preceding the test. A blood alcohol content (BAC) test confirmed the results of breathalizer tests which indicated greater than 0.04 BAC, the FFD program limit for alcohol. The individual was promptly and properly relieved of licensed responsibilities and referred to the licensee Medical Review Officer (MRO) for counseling/guidance. Licensee immediate actions were aggressive and consistent with their FFD program.

NRC assessment of the licensee FFD program and specific details regarding this FFD event are recorded in NRC Inspection Report No. 50-293/91-30.

6. Termination of Security Officer

The inspector reviewed a security incident that resulted in a security officer (S/O) being terminated due to inattention to duty. The inspectors review found that on October 31, 1991, the S/O was assigned to compensate for a perimeter intrusion detection system (IDS) zone that was degraded due to severe storm damage. At approximately 7:30 am a BECo security manager, while assessing the storm damage observed the S/O to be clearly inattentive to his assigned post duties. The security manager had the individual relieved of duties and directed a search of the Protected Area. The search resulted in no discrepancies.

The S/O was suspended without pay pending a review of the incident and his employment history. His employment history indicated two previous disciplinary problems in 1990. The S/Os employment was terminated on November 18, 1991.

Additionally, the inspector found that the S/O had been assigned to Sector 7 at 6:00 am and that a post check had been conducted by a security supervisor at 7:05 am. In addition to establishing the Sector 7 security post as a compensatory measure for the degraded IDS, other compensatory measures were in the Security Event Log as required by NRC regulation. The inspector concluded that the incident was appropriately handled by the licensee and identified no discrepancies.

7.0 SAFETY ASSESSMENT AND QUALITY VERIFICATION AND ENGINEERING AND TECHNICAL SUPPORT (71707, 92701, 92702)

7.1 Combined Utility Assessment

A combined utility assessment (CUA) of the adequacy of the licensee quality assurance program was conducted November 18-22, 1991. Representatives from four other utilities participated in this assessment which evaluated the following areas (1) Internal Audit/Oversight Activities, (2) Adequacy of Quality Assurance Department Verification of Corrective/Preventive Action, and (3) Adequacy of Quality Control/Non Destructive Examiner Training/Certification. The 1990 CUA had identified 17 recommendations for improvement. This 1991 assessment team confirmed the completion of actions for closure of all 17 items. The completion of these items represented a continued desire to improve performance.

7.2 Licensee Event Report (LER) Review

7.2.1 LER 91-21

LER 91-21, "Reactor Core Isolation Cooling (RCIC) System Declared Inoperable Due to Insufficient Battery Charger Test," describes the October 9, 1991, licensee determination of RCIC inoperability. Utilizing test data available, the licensee could not demonstrate that the RCIC inverter would not trip during a large AC voltage transient. This event is documented in NRC Inspection Report No. 50-293/91-24. Compensatory measures for operator response in the event of a RCIC inverter trip were well developed. The LER correctly addressed the reporting criteria. This LER is closed.

7.2.2 LER 91-22

LER 91-22, "Sattings of Reactor Water Cleanup High Flow Sensors Found Out of Tolerance During Surveillance," reports that during a routine surveillance, the as found trip setpoints of both Reactor Water Cleanup (RWCU) system high flow sensors were greater than Technical Specification limits.

The cause of the high flow sensors (DPIS-1243 and DPIS-1244) being out of calibration was setpoint drift which resulted from misalignment of the internal mechanical linkages within the sensors. Corrective action included adjustment of mechanical linkages and performance of the RWCU high flow calibration to verify repeatability of sensor trip setpoints. In addition, an engineering review was initiated concerning modification of sensor indicating range to enhance instrument reliability and accuracy. Corrective actions appropriately addressed the cause of this event. This LER is closed.

7.3 Followup of Previously Identified NRC Items

7.3.1 UNR (Closed) 90-13-02, Labeling and Storage of Safety Related Items

Previously, NRC inspectors observed that various safety related ("Q") components located in safety related level B storage drawers within the warehouse had their required protective rs and seals missing, and required shelf life requirements were not identified on the attached equipment tags. To address the above item, the licensee took the following actions:

- Retrained stores personnel to the requirements of procedure G-510, "Packaging, Inspection and Maintenance of Equipment in Storage" and enhanced the training program emphasizing packaging criteria.
- Issued and trained material personnel on work instruction, "Q" storage problem resolution procedure.
- Re-inspected "Q" parts in storage and documented results on Material Management/Accounts Payable/Purchasing form.

Licensee reinspection and corrections made regarding "Q" listed item storage were appropriate. Procedural upgrades and training initiatives addressed this subject. This item is closed.

7.3.2 UNR (Update) 91-04-01.3, Trip of High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) 125 VDC Inverters During Restart of Recirculation Pump

Previous reports documented the safety concern regarding potential inadvertent tripping of the HPCI/RCIC 125 VDC inverters in response to incoming AC voltage transients resulting from the start of large AC motors. The licensee consequently determined that RCIC was inoperable as documented in NRC Inspection Report No. 50-293/91-24. Following additional testing, analysis, and hardware modification the licensee dec. 1 the RCIC system operable on November 19, 1991. The basis for this determination was thoroughly reviewed and the determination of operability was appropriate.

The licensee installed a plant design change (PCD 91-63) which replaced the RCIC/HPCI inverters located in the control room with upgraded inverters. The new inverters were rated to provide designed output of 115 VAC over a wider input voltage range (105-160 VDC). Testing demonstrated that peak DC voltage transients experienced from the "B" battery charger and the "Backup" battery chargers remained well below the new 160 VDC inverter trip setpoint. The highest peak voltage spike associated with the "A" battery charger was 159.5 VDC. Due to the proximity to the inverter trip setpoint, the "A" battery charger remained administratively inoperable.

In addition, PDC 91-63 added an automatic inverter reset after input voltage conditions return to normal. Previously a manual inverter reset was required. A detailed study showed that a voltage perturbation (up to 160 VDC for 5 seconds) on the 125 VDC system would not cause the failure of any safety-related components supplied from the 125 VDC busses. The DC end user device study and implementation of PDC 91-63 were detailed and were performed in a controlled manner.

The new inverters were not intended to resolve any irregularity associated with the 125 V battery charger output voltage. Long term assessment of battery charger performance is not yet complete. This item remains open pending establishment and completion of the battery charger evaluation plan.

7.3.3 UNR (Closed) 91-04-02, Review of the Seismic Design Adequacy of the RHR Area Ventilation Ductwork

The inspector reviewed the Bechtel Corporation Specification, No. 6498-M-63, for the reactor building sheet metal construction contract at PNPS. This specification included requirements for the installation of all ductwork, related heating and ventilation system components, and the hangers providing the support for such HVAC components. Specification No. 6498-M-63 documents the technical provisions for the support of both vertical and horizontal ductwork and specifies that the design criteria for earthquake conditions (i.e., the seismic requirements) shall meet either Class I or Class II conditions, as marked on the appropriate design drawing.

The inspector also reviewed Specification No. 6498-G-5 relative to the generic criteria designated for Class I and Class II equipment design. Appropriate stress levels were specified relative to code allowable limits and material yield strengths. Continued normal operation of Class I equipment and the structural stability of Class II equipment, during earthquake conditions, were noted to represent design requirements. Review of Plant Ventilation Diagram, drawing M287 (Revision E15), indicated that the HVAC design for both the "A" and the "B" RHR quadrant rooms is seismic Class I, confirming the engineering intent to provide continued ventilation support for the operability of the RHR and Core Spray pumps during postulated credible seismic events. Thus, the adequacy of the seismic design of the HVAC systems questioned by the NRC was verified to be adequate not only to provide component structural integrity, but also to support sa⁷ Ay-related equipment operation during the plant conditions assumed by the PNPS design basis.

The inspector also spot checked the size and configuration of some of the ductwork supports in both the "A" and "B" RHR quadrant rooms to confirm compliance with design specification details. No nonconforming conditions v/ere identified. The inspector had no further questions regarding this concern. This item is closed.

8.0 NRC MANAGEMENT MEETINGS AND OTHER ACTIVITIES (30702, 94600)

8.1 Routine Meetings

At periodic intervals during this inspection, meetings were held with senior plant management to discuss licensee activities and areas of concern to the inspectors. Following completion of the inspection period, the resident inspector staff conducted an exit meeting with BECo management summarizing inspection activity and findings for this report period. No proprietary information was identified as being included in the report.

8.2 Management Meetings

On December 31, 1991 a conference call was conducted between representatives of NRC:Region I, NRR and the licensee to discuss extension of the completion date for evaluation of Switchgear/Battery room HVAC design basis and as-built operability. The completion date was extended to April 15, 1992.

8.3 Other NRC Activities

On November 18-22, an iARC Senior Radiation Specialist conducted periodic inspection of the licensee radiological controls program. Inspection results were documented in Inspection Report 50-293/91-26.

On December 2-6, NRC Operations Engineers (examiners/inspectors) administered licensed op dor requalification examinations. Results were documented in Inspection Report 50-293/91-25.

On December 11-13, NRC emergency preparedness inspectors, in conjunction with resident inspector staff members conducted an inspection of the December 12 annual emergency preparedness exercise. Inspection results will be documented in Inspection Report 50-293/91-28.

On December 7-12, NRC inspectors conducted an inspection of the licensee Fitness For Duty (FFD) program and specific information regarding a recent FFD occurrence. Inspection results were documented in Inspection Report 50-293/91-30.