

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-266/83-21(DE); 50-301/83-20(DE)

Docket No. 50-266; 50-301

License No. DPR-24; DPR-27

Licensee: Wisconsin Electric Power Company  
231 West Michigan  
Milwaukee, Wisconsin 53203

Facility Name: Point Beach Units 1 & 2

Inspection At: Two Creeks, Wisconsin; Milwaukee, Wisconsin.

Inspection Conducted: Two Creeks, Wisconsin on October 11-14, October 25-28, November 1-4, and November 16, 1983. Milwaukee, Wisconsin on October 13-14 and November 14, 1983, and January 11, 1984.

Management Meeting: Glen Ellyn, Illinois on January 4, 1984.

Inspectors: R. A. Hasse

*R. A. Hasse*  
2/13/84  
Date

*N. C. Choules*  
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*M. J. Jordan*  
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Approved By: *D. R. Hunter*  
D. R. Hunter, Chief  
Management Programs Section

2/13/84  
Date

## Inspection Summary

Inspection on October 11-14, October 25-28, November 1-4, and November 16, 1983 and January 11, 1984 (Report No. 50-266/83-21(DE); 50-301/83-20(DE)) and Management Meeting on January 4, 1984

Areas Inspected: Special, announced inspection by regional inspectors of QA Program administration; maintenance program and implementation; design change and modification program and implementation; procurement; Offsite Review Committee; document control; calibration and control of measuring and test equipment; surveillance and inservice testing; cleanliness control; audit program; steam generator replacement program. The inspection involved a total of 269 inspector-hours onsite by four inspectors including 0 inspector-hours onsite during off-shifts and 66 inspector-hours at corporate headquarters by four inspectors. A Management Meeting was held which involved 48 staff-hours.

Results: Of the 14 areas inspected, no items of noncompliance or deviations were identified in five areas; nine items of noncompliance were identified in the remaining nine areas (failure to maintain cleanliness control - Paragraph 3.j.(ii); failure to provide or follow procedures - Paragraphs 3.c.(ii), 3.e.(ii), 3.j.(ii) and 3.f.(ii); failure to control documents - Paragraph 3.k.(ii); failure to properly store records - Paragraph 3.c.(ii); failure to control stored items - Paragraph 3.m.(ii); failure to properly conduct an audit program - Paragraph 3.h.(ii); failure to perform 10 CFR 50.59 reviews - Paragraph 3.e.(ii); failure to conduct audits required by Technical Specifications - Paragraph 3.l.(ii); failure to provide appropriate training - Paragraph 3.a.(ii)).

## DETAILS

### 1. Persons Contacted

#### Wisconsin Electric Power Company (WEPCo)

- \*\*S. Burstein, Executive Vice President
- \* \*\*C. Fay, Vice President - Nuclear Power
- \* \*\*J. Zach, Manager, Point Beach Nuclear Plant
  - \*D. Stevens, Superintendent, Quality Assurance Division
  - J. Peters, Manager, Procurement
  - \*F. Flentje, Supervisor, Staff Services
- \* \*\*G. Krieser, Sr. Engineer, Quality Assurance Division
  - \*W. Herrman, Superintendent, Maintenance and Construction
  - \*M. Logan, Quality Engineer
- \*\*C. Krause, Project Engineer, Licensing
  - R. Heiden, Project Engineer, Quality Assurance Division
  - E. Padgett, Superintendent, Drafting
  - D. Porter, Manager, Nuclear Engineering
  - A. Pohl, Superintendent, Instrumentation and Controls
  - E. Leclair, Supervisor, Instrumentation and Controls
  - M. Crouch, Assistant to Superintendent, Maintenance and Construction
  - P. Keily, Quality Engineer
  - D. Robinson, Project Engineer, Quality Assurance Division
  - L. Weychert, Project Engineer, Nuclear Engineering Section
  - J. Jacovitch, Project Engineer, Nuclear Engineering Section
  - R. Seizert, Nuclear Engineer
  - K. Grasso, Quality Specialist
  - K. Nickles, Quality Specialist
  - R. Schwartzbeck, Nuclear Plant Engineer
- \*\*R. Link, Superintendent, Engineering, Quality and Regulatory Services
  - J. Reisenbuechler, Superintendent, Technical Services
  - T. Koehler, General Superintendent
  - T. Ross, Training Supervisor
  - G. Frieling, Superintendent, System Engineering
  - S. Schelling, Sr. Project Engineer, Nuclear Engineering Section
  - J. Ranzah, Supervisor, Power Plant Drafting
  - D. Ryan, Senior Drafter, Mechanical Section
  - G. Maxfield, Superintendent, Operations
  - G. Gray, Shift Superintendent
  - R. Mitchell, Shift Superintendent
  - R. Gerroll, Maintenance Supervisor
  - A. Karnon, Maintenance Mechanic
  - R. Pfefferkorn, Maintenance Electrician
  - R. Bruno, Superintendent, Training
  - R. Franz, Administrative Specialist
  - J. Schweitzer, ISI Engineer
  - R. Winget, Nuclear Plant Engineer

### Westinghouse

B. Garrow, Lead QA Site Engineer  
J. Dvorak, Training Coordinator

### Morrison-Knudsen

A. Wallcutt, Project QA Manager  
J. Stone, NDE III  
J. Biggar, QA Engineer  
D. Williams, Corporate NDE III  
J. Meredith, Training Supervisor

### USNRC

\*\*J. Keppler, Regional Administrator  
\*\*R. Spessard, Director, Division of Engineering  
\*\*J. Streeter, Chief, Engineering Branch 1  
\* \*\*D. Hunter, Chief, Management Programs Section  
\*R. Hague, Senior Resident Inspector  
\*B. Fitzpatrick, Resident Inspector

\*Denotes those attending the exit interview on November 16, 1983.

\*\*Denotes those attending the Management Meeting at Region III on January 4, 1984.

## 2. Action on Previous Inspection Findings

(Closed) Open Item (266/81-07-01; 301/81-06-01): Failure to control items with shelf-life limits. The licensee has failed to implement a program to control items in ready stores having limited shelf-life. This has been made an item of noncompliance (266/83-21-26; 301/83-20-26) (see Paragraph 3.m.(ii)).

## 3. Program Areas Inspected

### a. Quality Assurance Program

The PBNP Quality Assurance Program was inspected to determine if the program and its implementation were in compliance with regulatory requirements and Section 1.8 of the PBNP FSAR. Some areas of the program were inspected in greater depth and the results are reported in separate paragraphs of this report.



(i) Documents Reviewed

- PBNP FSAR, Section 1.8, "Quality Assurance Program", June 1983.
- PBNP-1.1, "Organization, Overall Responsibility and Authority", Rev. 14.
- PBNP-3.3.2, "Administration of Quality Assurance Audits", Rev. 2.
- PBNP-1.7.3, "Quality Assurance Coordinator", Rev. 8.
- PBNP-1.7.2, "Quality, Standards and Records Organization", Rev. 8.
- PBNP-2.2.8, "Procedures for Feedback of Operating Experience to Plant Staff", Rev. 1.
- PBNP-2.2.10, "Administrative Punch List", Rev. 1.
- QAI-1, "Documenting QA Activities", Rev. 3.
- QAI-2, "Document Review", Rev. 5.
- QAI-3, "QAI Preparation, Revision, Issue and Control", Rev. 4.
- QAI-16, "Quality Assurance Project Plans", Rev. 0.
- PBNP-2.3.1, "Reportability, Review and Documentation of Reportable Occurrences, Significant Operating Events, and Events of Potential Public Interest", Rev. 14.
- PBNP 1983 Audit performed by Gilbert/Commonwealth Associates, June 15, 1983.
- PBNP QA and Reliability Manual, QA Volume II.
- NCRs numbered 50 (7-16-81) through 60 (7-12-83).
- QA Committee Meeting Minutes for Meetings numbered 37 (3-10-82) through 42 (6-15-83).
- Managers Supervisory Staff 1983 Meeting Minutes numbered 83-01 through 83-26.
- Licensee Event Reports (LERs) for 1982 and 1983.

- Generic Letter 81-01, "Qualification of Inspection, Examination, Testing and Audit Personnel", May 4, 1981.
- WEPCO response to Generic Letter 81-01, dated July 31, 1981.
- NRR acceptance of WEPCO response to Generic Letter 81-01, dated April 19, 1982.

(ii) Results of Inspection

The licensee's QA Program is described in Section 1.8 of the FSAR. Implementing procedures are included in QA Volume I, "Point Beach Nuclear Plant Administrative Control Policies and Procedures Manual" (PBNPs) and various department procedures. QA Volume II, "Quality Assurance and Reliability Manual for Materials, Repairs and Modifications", defines the quality assurance program to be imposed for materials, repairs and modifications for PBNP along with program objectives and responsible company organizations and personnel. It also defines those systems and components to which the program applies.

Section 1.8.2 of the FSAR states that management review of the status and adequacy of the QA program is accomplished in part by at least semiannual review by the WEPCO QA Committee (QAC). This committee is composed of management representatives from participating departments within WEPCO (nuclear and non-nuclear) and a consultant. A review of the QAC meeting minutes from March 1982 through June 1983 showed that the first effort to assess the QA program during this period in a comprehensive manner occurred in May 1983. During May 1983 a consultant from Gilbert/Commonwealth Associates (G/C) at the request of the QAC conducted an audit of the WEPCO QA program and implementation for compliance with Section 1.8 of the FSAR. One of the findings of this audit was that the QAC had been ineffective in its review of the status and adequacy of the QA program (finding 83-024). The QAC had conducted only one audit of the nuclear QA program in 1981 and one in 1982. Neither audit was sufficiently comprehensive to assess the program. The licensee had recognized this problem and initiated the G/C audit as a first step in taking corrective action. Actions have also been initiated to provide long term corrective action. The failure of the QAC to review the status and adequacy of the QA program on a semiannual basis as committed in the FSAR is considered a violation of 10 CFR 50, Appendix B, Criterion II. However, since this item was also identified by the licensee and in accordance with NRC enforcement policy, it will not be pursued as an item of noncompliance unless the licensee fails to take timely and effective corrective action. This is considered an unresolved item pending review of the completed corrective action (266/83-21-01; 301/83-20-01).

Criterion II of 10 CFR 50, Appendix B states in part: "The program shall provide for indoctrination and training of personnel performing activities affecting quality...." Section 1.8.2 of the FSAR states that the program provides such training and that training procedures are established. A review of the G/C audit revealed several potential noncompliances or program deficiencies in this area. The findings and finding numbers are listed below:

- 83-004 - NES personnel receive no QA indoctrination training.
- 83-010 - Lack of QA Training and Training Procedures for purchasing and stores personnel as required by FSAR Section 1.8.2.
- 83-017 - Incomplete training records for QAD personnel (as required by QAI-9).
- 83-039 - Maintenance supervisors sign off for inspections performed without evidence of inspection training on file.
- 83-042 - All inspections performed by I&C personnel are done without inspection training (including receiving inspection).
- 83-049 - Receipt inspection is performed by storeroom personnel not having documented training in receipt inspection and especially 10 CFR 21 applicability.
- 83-051 - A plant-wide lack of knowledge exists in the area of requirements of 10 CFR 21.
- 83-054 - Of ~ 30 plant personnel sampled, less than 50% had evidence of QA indoctrination on file. Only one individual had any evidence of retraining to maintain proficiency.

An evaluation of the corrective action responses to these findings revealed the following shortcomings:

- 83-004 - No date was committed for completion of corrective action.
- 83-017 - The response did not specify the periodicity of training record reviews or a date for implementation.

- 83-039 - The response did not address the specific issue presented in the finding. The response addressed the craft skill training but did not address inspection training.
- 83-042 - The response addressed receiving inspection training only.
- 83-051 - No date was committed for completion of corrective action.
- 83-054 - No date was committed for completion of corrective action.

The inspectors examined the inspection training of maintenance and I & C personnel (G/C findings 83-039 and 83-042) relative to the requirements of Generic Letter 81-01, the WEPCO response to that letter and the conditions of the NRC acceptance of the WEPCO response. The WEPCO response basically stated the inspection program described in FSAR Section 1.8.10 as an alternative to the requirements of Generic Letter 81-01. The NRC accepted the WEPCO alternative contingent, in part, upon WEPCO maintaining adequate records to provide objective evidence of the following activities:

- The use of "peer" type, independent inspection for final acceptance of work.
- Initial evaluation and periodic reevaluation of personnel who perform these inspections.
- Necessary training to assure acceptable proficiency of these personnel.
- Requirement for demonstrated proficiency of these personnel.

The PBNP FSAR Section 1.8.10 states that, with few exceptions, Point Beach personnel meet the requirements of ANSI 18.1-1971 (as required by Section 3.4.2 of ANSI 18.7-1976) and are therefore qualified to perform plant inspection, examination, and testing activities. ANSI 18.1-1971 does not directly address the qualifications for inspection personnel. It does require that training and retraining programs be established to develop fully qualified personnel and to maintain proficiency (Section 5.1). FSAR Section 1.8.2 states that personnel performing quality related activities are trained and qualified in the principles and techniques of the activity being performed and that appropriate training procedures are established. The failure to provide inspection training for maintenance and I & C personnel performing inspections is considered a violation of 10 CFR 50, Appendix B, Criterion II (266/83-21-02; 301/83-20-02).

The failure to provide training (including procedures for and documentation of that training) for other personnel performing activities affecting quality as noted in the G/C audit is considered an unresolved item pending review of the completed corrective actions (266/83-21-03; 301/83-20-03).

Section 1.8.16 of the FSAR, "Corrective Action", states: "Procedures and practices are established and documented to assure that conditions adverse to quality; such as deviations are promptly identified and corrected. In the case of significant conditions adverse to quality, these measures include assurance that the cause of the condition is determined and corrective action taken to preclude repetition. These include provisions for identification of the significant condition adverse to quality, the cause of the condition and the corrective action taken to be documented and reported to appropriate levels of management. Provisions are included for followup reviews to verify proper implementation of corrective actions and to close out the corrective action documentation." There are several weaknesses in the corrective action system currently in place at PBNP.

While reviewing IST records for valves, the inspector noted a comment in the margin on the data record made by the person performing the test that valves 850 A and B were not fully closed when the indicating lights indicated the full closed position. The inspector asked the engineer that had reviewed and approved the data record if this condition had been corrected; the engineer did not know. He stated that the operator should have initiated an MR to repair the valve. The inspector asked if there was a tracking system to assure that the repair was accomplished; he stated that there was not. The engineer informed the inspector the following day that the operator had initiated an MR and provided the MR number. Apparently this system places almost total reliance on the operator to have done the "right" thing with no formal verification or tracking on the part of supervision, such as the noting of the MR number initiated in the procedure margin by the operator.

Tracking weaknesses extended to other corrective action situations as well. It was noted by the OSRC in minutes of Meeting No. 29 that the Administrative Punch List (APL) was ineffective in serving as a tracking document for SOERs. It was noted that while the completion of required reviews were tracked and documented, required corrective actions or their completion were not tracked.



The corrective action documents used by the licensee include the Maintenance Request (MR), SOEs, LERs, NCRs, QDRs and ADRs. The MR covers hardware problems. The NCRs, SOEs and LERs cover significant conditions. The QDRs and ADRs cover specific areas. There was no formal system for reporting or review of those items that do not fall within the criteria for these documents such as a deviation report which would cover any or all deviations or nonconforming conditions adverse to quality and could be written or initiated at any organizational level. While many such items were covered in the Manager's Supervisory Staff Meetings and tracked as open items in the meeting minutes (and sometimes the APL), there is no system for assuring all items were documented in a systematic manner. This could preclude these items from being considered in assessments of QA program status, adequacy and effectiveness.

As noted in Paragraphs 3.1 and 3.h, the OSRC does not perform audits of corrective action effectiveness as required by the Technical Specifications nor has the QAD performed any audits of the overall corrective action system in the last two years (audits of some corrective action systems such as the Maintenance Request System have been performed).

These items collectively indicate weaknesses in the corrective action program. This weakness is considered an open item and will be reviewed further in a future inspection (266/83-21-04; 301/83-20-04).

b. Maintenance Program

The inspector reviewed the licensee's maintenance program to ascertain whether the QA program relating to maintenance activities had been established in accordance with the Quality Assurance Program and 10 CFR 50, Appendix B requirements. The following items were considered during this review: written procedures had been established for initiating requests for routine and emergency maintenance; criteria and responsibilities had been designated for performing work inspection of maintenance activities; provisions and responsibilities had been established for the identification of appropriate inspection hold points; methods and responsibilities had been designated for performing testing following maintenance work; methods and responsibilities for equipment control had been clearly defined; documentation requirements have been established to identify the persons who performed the maintenance, replacement parts used, corrective action taken and the root cause of the equipment failure; and administrative controls had been established for controlling special processes.

The inspector also reviewed the licensee's Preventative Maintenance Program to verify that a written program had been established which included responsibility for the program, a master schedule for preventative maintenance, and documentation requirements.

(i) Documents Reviewed

- PBNP 2.2.1, "Records Administration and Storage", Revision 7
- PBNP 2.2.3, "Component Instruction Manuals", Revision 6
- PBNP 3.1.3, "Maintenance Requests", Revision 7
- PBNP 3.4.1, "Ignition Control Permit Procedure", Revision 5
- PBNP 3.4.8, "Transient Combustible Controls", Revision 0
- PBNP 4.1.3, "Equipment Isolation Procedure", Revision 10
- PBNP 5.0.1, "Assistant to Superintendent - Maintenance and Construction", Revision 1
- PBNP 5.1.1, "Routine Maintenance Procedures", Revision 2
- PBNP 5.1.2, "Special Maintenance Procedures", Revision 4
- PBNP 5.1.3, "Preventive Maintenance Program", Revision 1
- PBNP 5.1.4, "Corrective Maintenance", Revision 4
- PBNP 5.4.2, "Planning and Performance Electrical System Testing and Repair", Revision 2
- PBNP 5.4.3, "Electrical System Testing and Repair Records", Revision 3
- PBNP 5.7, "Machinery History", Revision 0
- PBNP 5.6, "Maintenance Employee Progression Training Program", Revision 1
- PBNP 6.1.3, "Maintenance Request (Instrument and Control)", Revision 2
- PBNP 6.1.8, "Machinery History (Instrument and Control Group)", Revision 1



(ii) Results of Inspection

The licensee's procedure for the control of maintenance activities was PBNP 3.1.3. PBNP 6.1.3 contained supplemental instructions for the I&C group regarding maintenance requests. PBNP 5.1.4 contained instructions which were almost the same as PBNP 3.1.3 and apparently was not used any longer based on interviews with Maintenance Supervision. The inspector's review of the current Revision 7 of PBNP 3.1.3 and the associated Maintenance Request (MR) form revealed the following:

- As noted above there were three procedures which described the processing of MRs. It appeared that these three could be combined into one and eliminate possible confusion.
- The purpose of 3.1.3 is, in part, "to provide a means for all personnel to report deficiencies that require maintenance work which does not involve a substantial modification." Normal maintenance does not involve modification and the phrase "which does not involve a substantial modification" is not appropriate.
- There was no requirement in the procedure or on the MR form for shift supervision to document approval for work to commence. Interviews revealed the approval was verbally obtained and, if a tagout was required, approval was documented on the tagout form. Also shift supervision did not get a copy of the MR at the time work commenced which should be used to keep the control room informed on what work was in progress for plant status and shift turnover purposes. With this informal system it was possible for work to be performed on the plant without shift supervision's knowledge. This matter is considered to be a significant weakness, and was discussed at length with licensee representatives. The licensee took some prompt corrective action which included issuing a memorandum to all personnel to require notification of shift supervision and the maintenance of "in process" MRs by the shift supervisor.
- There was no requirement for shift supervision to document on the MR that the maintenance had been satisfactorily completed and followup requirements had been completed.
- The procedure and the MR form did not address requirements to reference the associated Radiation Work Permit (RWP) and equipment tagout on the MR form.

- Review of completed MRs showed that Operations stamps the MR form for required return to service testing. Procedure PBNP 3.1.3 does not describe this activity. The MR form and the tagout form also have equipment testing requirements. It appeared that the testing requirements could be combined into one requirement to avoid confusion.
- Cognizant maintenance supervision was not required to approve MRs and had limited involvement in the preparation of the MR. As discussed in Paragraph 3.c.(ii), there was a lack of adequate work instructions on most completed MRs. Not having cognizant maintenance supervision in the preparation and approval chain may have contributed to this lack of instruction.
- The MR form did not have a space allotted specifically for work instructions to the maintenance worker. When work instructions were provided it was usually in the paragraph entitled "Defect (Describe the Problem), Request (When defect does not exist but a request for service is made)". Neither the procedure nor the form emphasized the need for adequate work instruction in the preparation of the MR, nor specifically required the cognizant maintenance supervisor to determine the need for work instructions.
- If the requirements of a maintenance activity exceeded the scope specified on the MR, there was no written guidance in the procedure to terminate the work and revise the MR or initiate a new MR. Continuing to work outside the original scope of the MR would result in an unapproved work activity.
- There was no requirement to identify test and measuring equipment used on an MR. (This was also identified in the recent Gilbert/Commonwealth Associates audit.)
- There was no requirement for cognizant maintenance supervision to evaluate if the MR was a design change and document this decision on the MR form.
- There was no requirement for cognizant maintenance supervision to review the completed MR and assure that the root cause was determined and documented.
- Maintenance supervision was not required to insert "hold points", nor was QA required to review and approve MRs and insert "hold points" if required prior to issuance of the MRs.

- There was no guidance in the procedure related to work within craft capability or when a maintenance procedure should be prepared based on the complexity of the work.
- The procedure did not address the reportability of the failure or malfunction which was identified by the MR, nor was there a requirement to reference on the MR form any reports which were generated.
- The MR form required documenting whether an ignition permit was required. There was no guidance in the procedure as to when an ignition permit was required or reference to the ignition permit procedure which contained such guidance.
- The procedure required documenting information on the MR to identify traceability of any parts used. However, there was no discussion or reference to another procedure on how to initially obtain the part.
- The procedure did not provide any guidance on the temporary and permanent storage of MRs.
- There was no requirement to put the date the work activity was initiated on the MR form. This could be useful when reviewing an event.
- Interviews revealed that QA reviewed all completed work requests; however, there was no requirement in the procedure for QA to review all MRs.

The above items were discussed with the licensee. The licensee stated that these items would be included as items to be addressed in a planned upgrade in their maintenance program. This is considered to be an open item pending further review of the licensee's action during a subsequent inspection (266/83-21-05; 301/83-20-05).

The inspector reviewed the licensee's program for control of Technical Manuals. A program was in place. Procedure PBNP 2.2.3, Revision 6 provided the guidance and requirements. The procedure required Technical Manuals to be updated as changes were received from the vendors; however, it did not specify who was responsible for compiling the changes and assuring that the changes were distributed and accomplished.

Review of the licensee's Preventative Maintenance (PM) Program showed that the program had been established and implemented. The program included a schedule and PM procedures in the form of callup card which included instructions or referenced

procedures for performing the PM. Description and responsibilities for the PM program were described in PBNP 5.1.3. Review of Revision 1 of this procedure revealed that there were no instructions specifying the following for the PM program:

- Responsibility for establishing the frequency for performing preventative maintenance.
- Responsibility and requirement of upgrading the PM Program based on system failures.

The licensee had established machinery histories for operating equipment. Review of the machinery history procedure, PBNP 5.7, Revision 0, revealed it did not contain a requirement to periodically review the machinery history cards for repetitive failures or other problems.

The licensee had developed an ignition control permit procedure, PBNP 3.4.1, which specified the requirements for ignition permits and fire watches. A weakness was noted in Revision 5 of the procedure in that it did not require the fire watch to be capable of communicating with the control room when a fire hazard activity was performed in the proximity of flammable material, cable trays, or vital equipment.

Review of the procedures for preparation of Special and Routine Maintenance Procedures (PBNP 5.1.1 and 5.1.2) showed there was no requirement to insert "hold points" in these procedures, when applicable.

These items are considered to be an open item pending further review of the licensee's actions during a subsequent inspection (266/83-21-06; 301/83-20-06).

Review of the index for Routine Maintenance Procedures (RMPs) showed that only 22 procedures had been prepared. This is a small number considering the number of maintenance tasks performed and the length of time the plant has operated.

Interviews revealed the licensee was performing independent position verifications of instrument isolation and bypass valves that were manipulated for calibrations during refueling outages. Calibrations are not normally performed during plant operations except if maintenance was required. The licensee identified during the interview

with the inspector that independent position verification during maintenance had not been addressed and agreed to address the matter. This is considered to be an open item pending further review of the licensee's action during a subsequent inspection (266/83-21-07; 301/83-20-07).

No items of noncompliance or deviations were identified.

c. Maintenance Program Implementation

Maintenance activities of safety related systems and components were reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides, industry codes or standards, and in conformance with Technical Specifications. The following items were considered during this review: limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials were properly certified; radiological controls were implemented; and fire prevention controls were implemented.

(i) Documents Reviewed

The following completed Maintenance Requests (MRs) were reviewed:

<u>MR No.</u>	<u>Maintenance Activity</u>
• 29753	Repair K4A Air Compressor for Emergency Diesel Generator System
• 33085	Check Safety Injection Valve 2MOV852B for worn parts
• 33578	Reactor Protection Relay IRB-24 sticky
• 34916	SI Pump 2P15A Exhibits Excessive Leakage
• 34933	Torque Limiter Mating Flange on 2MOV-852B leaks oil
• 35157	Replacement and Exchange of Pressurizer Sampling Valve for Modification Request 82-114

- 35717 Auxiliary Feedwater Check Valve 1-P-29 Leakage
- 35727 Repair K5A Air Compressor for Emergency Diesel Generator System
- 35731 Auxiliary Feedwater Valve AOV 4012 Open Limit Switch does not operate
- 36063 Primary Sampling Valve 12-966C stroke time increased
- 36266 Main Steam B Steam Generator Atmospheric Relief Valve did not open fully
- 36616 Component Coolant Valve MOV755A Repair
- 36617 CVCS Unit 1 Charging Pump Excessive Leakage
- 36630 CVCS Unit 1 Charging Pump 1P2C Large Instrument Air Leak
- 36761 CVCS Unit 2 Charging Pump 2P2A, Disassemble Pump and Check Bearing Clearances and General Condition
- 36762 Containment Ventilation System Inspection and Repairs
- 36764 CVCS Unit 2 Charging Pump, Disassemble and Check Condition of Pump
- 36785 Replaced Air Start Motor on G01 Diesel
- 37111 Replace I/P and Air Regulators on Valves 2SI836A and 2SI836B
- 37120 Steam Flow Transmitter 2FT 474 Failed Mid Scale
- 38005 Repair Leaking Seal on Unit 1 Charging Pump 1P2C
- 38010 Volume Control Divert Valve LCV112A Positioner Repair
- 38030 Component Cooling Valve 2MOV-738A did not fully close
- 38058 Auxiliary Building Exhaust Fan W-32 Motor burned up



- 38068            Safety Injection Pump 2P15A Bearing Fan Loose on both ends of pump
- 38084            Nuclear Instrumentation 2NI-32B Source Range not working

Selected completed Preventative Maintenance Call Up Cards were also reviewed.

The following routine maintenance procedures were reviewed to verify that they were technically adequate and in conformance with the applicable standards and Technical Specifications:

<u>No.</u>	<u>Title</u>
RMP 2P	"Reactor Coolant Pump Maintenance", Revision 1
RMP 19	"Repair Seat Leakage on FCV-HOA-C or FCV-11", Revision 0
RMP 22	"Cell Replacement for Batteries D05 and D06", Revision 3
RMP 24	"Governor Replacement Unit 3D (4D)", Revision 3
RMP 25	"Repair Waste Gas Compressor KIA (KIB)", Revision 0

#### (ii) Results of Inspection

Review of MRs 34916, 36643 and 38068 and interviews revealed that the Unit 2 2P15A safety injection pump was disassembled, repaired and reassembled to correct deficiencies described on these MRs in June 1983. These repairs were made without the use of an approved special or routine maintenance procedure based on interviews with personnel and the fact that there were no instructions or reference to maintenance procedures or technical manual for performing these repairs listed on the MRs. Licensee representatives stated that technical manuals were used; however, these were not approved or controlled. ANSI N18.7-1976, Section 5.2.7 requires maintenance to be preplanned and performed in accordance with written procedures appropriate to the circumstance. Disassembly, repair, and reassembly of a safety injection pump was beyond the normal skill of the crafts. Failure to specify and utilize the appropriate approved maintenance procedures which include the appropriate qualitative and quantitative acceptance criteria for repair of the 2P15A safety injection pump is an item of noncompliance pursuant to 10 CFR 50, Appendix B, Criterion V, the Quality Assurance Program as described in Section 1.8 and 1.8.5 of the FSAR, and ANSI N18.7 (301/83-20-08A).



Interviews revealed that no written procedure existed for the setting of torque switches on limit torque valves and there was no requirement to record the amperage used to set the torque switches. Verbal instructions were used to set torque switches. On June 10, 1983, the torque switch for Component Cooling Water Valve 2MOV-738B was adjusted per MR 38030 without a written procedure.

As described above, ANSI N18.7 requires written procedures appropriate to the circumstance. It is the inspector's experience that the industry considers setting of torque switches to be beyond the normal skill of the crafts; however, the licensee disagrees with this position. Failure to have a written procedure which includes the appropriate qualitative and quantitative acceptance criteria, and setting 2MOV-738B without a procedure is an item of noncompliance pursuant to 10 CFR 50, Appendix B, Criterion V, the Quality Assurance Program as described in Section 1.8 and 1.8.5 of the FSAR and ANSI N18.7-1976 (266/83-21-08A; 301/83-20-08B).

During the inspector's review of maintenance the inspector noted that MRs which had been prepared and completed since 1978, starting with No. 20006 through approximately 38000 were stored on open shelves in the maintenance office and in non-fire rated cabinets in the I&C office. These MRs included many which were safety related. Also technical specification tests completed by maintenance were stored in non-fire rated file cabinets in the maintenance office. Some of the test records stored and the date of the tests were PT-M-1, Station Battery (1971-1983); PT-S-2, Emergency Diesel Annual Inspection (1976-1983); and PT-A-1, 3A Emergency Diesel Annual Inspection (1971-1983). Technical Specification 15.6.10 requires records of principal maintenance activities and periodic checks to be retained. Regulatory Guide 1.88 and ANSI N45.2.9, Section 5.6, require these records to be stored in fire rated vaults or duplicate records stored in a remote location. The licensee procedure, PBNP 2.2.1, requires these records to be stored in the vault or microfilmed for duplicate records storage. These records were not stored in a fire rated vault nor was a duplicate record established. This is an item of noncompliance pursuant to 10 CFR 50, Appendix B, Criterion XVII, the Quality Assurance Program as described in Sections 1.8 and 1.8.17 of the FSAR, Regulatory Guide 1.88, ANSI N45.2.9 and PBNP 2.2.1 (266/83-21-09; 301/83-20-09).

The MR form requires maintenance supervision to reference SMPs, Drawings, Procedures, etc., on the MR form. Review of completed MRs 36617, 36761, 36764 and 38005 revealed that maintenance supervision had not listed the SMP or RMP numbers or titles on the MR form. Failure to list the appropriate SMP or RMP on the MR form is an item of noncompliance pursuant to 10 CFR 50, Appendix B, Criterion V, and the Quality Assurance Program as described in Section 1.8.5 of the FSAR. (266/83-21-08B; 301/83-20-08C).

Review of completed MRs listed in Paragraph 3.c.(i) revealed they usually only contained documentation of the problem and the corrective action. There was rarely any instructions provided on the MR form for maintenance personnel performing the work. Very seldom was an SMP, RMP, technical manual, or drawing referenced on the MR form. There was very little written evidence of any preplanning of a maintenance activity. This is considered to be a significant weakness.

Interviews revealed there were no independent QC inspections of maintenance work in progress. The licensee had no plant personnel dedicated to performing independent QC inspections. Any inprocess inspections performed were by maintenance supervision who were not independent nor did they have any documented inspection training. This is discussed further in Paragraph 3.a.(ii).

Review of procedure RMP-25, "Repair of Waste Gas Compressor KIA (KIB)", Revision 0, revealed that the instruction provided for repair of the compressor was inadequate. Section 3.3 of the procedure states "Disassemble and Repair KIA (KIB) waste gas compressor as required. There was no reference to a technical manual, drawing or instruction on how to perform the disassembly and repair. This is considered to be an open item pending further review of the licensee's action during a subsequent inspection (266/83-21-10; 301/83-20-10).

Review of procedures RMP 19, 22, 24 and 25 showed there were no hold points included in any of these procedures. This was discussed with the licensee for his consideration.

d. Design Change and Modification Program

The inspectors reviewed the licensee's Design Change and Modification Program to ascertain whether the QA program relating to design change activities had been established in accordance with the licensee's Quality Assurance Program; 10 CFR 50, Appendix B; the Technical Specifications and ANSI N45.2.11, 1974.

(i) Documents Reviewed

- Point Beach Quality Assurance Program Section 1.8 of FSAR, June 1983
- Section II of QA Volume II

- PBNP 2.2.4, "Drawing Change Procedure", Revision 25
- PBNP 2.2.5, "Instructions for Making Changes to PBNP Setpoints and Revising Setpoint Document", Revision 5
- PBNP 2.2.7, "Incorporation of New Drawing and Administrative Upgrading of Drawing Documentation", Revision 2
- PBNP 3.1.2, "Modification Request", Revision 13
- PBNP 3.1.1, "Authorization of Changes, Tests and Experiments (10 CFR 50.59)", Revision 8
- PBNP 4.17, "Lifted Wires, Jumpers and Bypasses", Revision 4
- PBNP 5.1.2, "Special Maintenance Procedures", Revision 4
- PBNP 5.3, "Tests and Inspections After Major Modifications", Revision 0
- Drawing Change Notice Status List, 11/1/83
- NES (Nuclear Engineering Section ) 3.2, "Drawings", 6/1/81
- NES 3.4, "Processing of Specifications and Technical Data", 6/1/81
- NES 3.5, "Procurement Document Control", 6/1/81
- NES 3.7, "Quality Assurance Audit Program", 6/1/81
- NES 3.9, "Design Related Calculations", 6/1/81
- NES 3.10, "Nonconformance Reports", 6/1/81
- NES 3.11, "Purchase Requisitions", 6/1/81
- NES 3.12, "Equipment Qualification Documentation", 7/15/83
- NES 4.3, "Modification Request", 6/1/81
- NE 4.6, "Offsite Review Committee", 6/1/81

(ii) Results of Inspection

The licensee's main procedure for control of design changes was PBNP 3.1.2, "Modification Request", Revision 13. The Corporate Nuclear Engineering Section procedure for control of design changes was NES 4.3, "Modification Request", dated 6/1/81, and referenced PBNP 3.1.2 for preparation and implementation of design changes. Several other procedures supported design change activities. Review of the design change program given in these procedures revealed that the program does not fully meet the requirements of ANSI N45.2.11, 1974, "Quality Assurance requirements for the Design of Nuclear Power Plants." Some of the areas of the standard not addressed are listed as follows:

- All of design input listed in Section 3.2 of the standard are not addressed.
- Design analysis instructions required by Section 4.2 have not been prepared.
- Interface control requirements of Section 5 were only partially identified. The interfaces between the site and NES and different site organization were not well described. NES did not have internal or external interface procedures. The lack of NES internal interface procedures was also identified in the Gilbert/Commonwealth Associates audit.
- The current procedures did not fully describe design verification and who can perform it as described in Section 6.1.
- All design review items listed in Section 6.3.1 were not addressed.

The licensee had identified that an additional procedure was required to meet the requirements of ANSI N45.2.11 and was in the process of preparing this procedure. This is considered to be an open item pending further review of the licensee's action during a subsequent inspection (266/83-21-11; 301/83-20-11).

Review of procedure PBNP 3.1.2, Revision 13 revealed the following:

- Section 4.9 required that "a new or modified system should not be placed in operation until appropriate changes are made to the P&IDs and the logic diagrams in the control room. This is

a necessary requirement; however, there was no requirement to document prior to acceptance of the system for operation that the required drawings had been marked up. Also there was no requirement to document which specific drawings were required to be marked up.

- There was no requirement to establish training requirements for a modification prior to and/or after releasing for operation. There was no discussion on how information on the modification is given to the training department. Interviews with the training department revealed that training on modifications was being accomplished but the program had not been formalized and the licensee recognized that improvements were needed.
- Section 4.1.7 of the procedure required that documents requiring changes are indicated on page 6 of the modification request form by the Modification Engineer. Identification of document changes was indicated by a check mark by the applicable documents listed on page 6 such as drawings and procedures. There was no requirement to identify the specific documents to be changed or to document this in the modification package. When the responsible person initialed that the document identified on page 6 had been changed, there was no record of the specific documents that had been changed.
- The procedure described the methods by which a modification could be installed such as a Special Maintenance Procedure (SMP) or Maintenance Request (MR). However, there was no guidance on when an SMP was required such as for complicated modifications or an MR for very simple modifications. There was no guidance on what should be in an installation procedure, such as reference to drawings, weld procedures, and construction procedures.
- There was no requirement to identify or attach a copy of the SMP, MR, or other implementing procedures as part of the modification history package.
- There was no guidance in the procedure which addressed what documents should be included in the final modification history package.

- Section 4.3.1 of the procedure indicates that a safety evaluation, as required by 10 CFR 50.59, was required for only safety related modifications. It did not address changes to the facility as described in the FSAR as required by 10 CFR 50.59.
- There was no guidance provided on the procurement of safety related equipment for a modification request such as referencing the procurement procedure.
- There was no discussion related to sending 10 CFR 50.59 safety evaluation to the Offsite Review Committee for approval when the modification involved an unreviewed safety question.
- Section 4.2.2.0 required that fire hazard associated with the installation of the modification be evaluated. There was no requirement to identify design requirements for fire protection associated with a modification.
- There was no requirement for Quality Assurance to review the modification request package, after preparation but prior to implementation to assure QA requirements were included. Also there was no requirement for QA to review the modification package after the modification had been completed to assure that all the necessary documentation was included and properly completed.

The licensee agreed to consider the inspector comments for incorporation into the design change program. This is considered an open item pending further review of the licensee's action during a subsequent inspection (266/83-21-12; 301/83-20-12).

Other matters identified in the review of the design change program were as follows:

- Review of the Drawing Change Notice (DCN) status list of November 1, 1983, showed there was significant backlog of drawings requiring revision. Approximately 160 drawing revisions were outstanding for DCNs originated between January and October 1983. Interviews revealed that the backlog had been larger and the licensee was taking steps to reduce it.
- Interviews revealed that NES engineers were generally not familiar with ANSI N45.2.11-1974.



- The drawing control program did not require informing the central drawing control person that a modification request was in progress which changed certain drawings until the modification was completed. This created the possibility that two or more persons could be making changes to the same drawings without other(s) knowing it. Also there was no description of how drawing revisions are handled between initiation and completion of the modification. The system that one of the contractors went through to revise a drawing was described to the inspector by an NES engineer and it was quite complicated. This was not described in any procedure. The procedure for drawing control, PBNP 2.2.4 described the initiation of a DCN starting with the "as-built" condition or when an error was noted on a drawing.

Procedure PBNP 4.17, "Lifed Wire, Jumpers and Bypasses", Revision 4, specified the means of controlling jumpers on plant systems. Review of this procedure showed there was no requirement to perform a 10 CFR 50.59 review for the installation of bypasses or jumpers not covered by procedures which could affect plant safety. The procedure did not address the use of mechanical devices such as dutchmen, temporary strainers, blind flanges and piping bypasses. Also the procedure did not require independent verification of the installation and removal of jumpers and bypasses as required by ANSI N18.7-1976. The inspector discussed revising the procedure with the licensee to include 10 CFR 50.59 review requirements; approval of jumpers and bypasses by the Manager's Supervisory Staff (MSS) prior to installation except for backshift emergencies where MSS approval can be after the installation; independent review of installation and removal of jumpers and bypasses; a periodic review of the jumper and bypass log; and control of mechanical jumper devices. The licensee representatives stated they were aware of most of the above items and were writing a temporary modification procedure to control jumpers and bypasses which would include these items. This matter is considered to be an open item pending further review of the licensee's actions during a subsequent inspection (266/83-21-13; 301/83-20-13).

No items of noncompliance or deviations were identified.

e. Design Change and Modification Program Implementation

The inspector reviewed the implementation of the licensee's Design Change and Modification Program to verify compliance with the Quality Assurance Program; 10 CFR 50.59, 10 CFR 50, Appendix B, and the Technical Specifications. Several completed and proposed modifications were reviewed.



(i) Modifications, Logs, and Procedures Reviewed

- M661, Unit 1 RCS Vent Connection to PRT.
- 83-11, Addition of Fire Wall Between three Service Water Pumps
- 82-23, Addition of Drain Line to Containment Spray Line
- 82-28, Override to Open Valves in Safety Injection System
- 82-51, Relocate Emergency Diesel Generator Fuel Oil Supply Line
- 82-53, Control Room Indication for Auxiliary Feedwater Valves
- 82-73, Improve Shielding Around Reactor Coolant Demineralizer
- 82-114, Replace and Exchange Pressurizer Sample Valves
- 83-05, Replacement of 2-955 Valve
- 83-34, Insulate RV Loop Seals
- 83-66, Addition of Shield Wall Close to Reactor Coolant Filters
- 83-97, Temporary Transformer Installation to Provide Electrical Power for Steam Generator Activities
- Jumper Bypass and Lifted Lead Log
- SMP 425, Special Maintenance Procedures (SMP) which Implemented Modification Request 82-13
- SMP 427, SMP which Implemented Modification Request M661
- SMP 428, SMP which Implemented Modification Request M661

(ii) Results of Inspection

Review of Modification Request 82-114 showed that there was no documented independent technical review performed for the replacement and interchange of Unit 1 pressurizer sample valves for the modification. Section 4.4.1 of Procedure PBNP 3.1.2, Revision 13 required that "independent technical review(s) of the design change is obtained..." Section 11.a of the

modification request form required the technical review to be documented in Section 11.a of the form. The independent review was not documented in Section 11.a of the modification form for Modification Request 82-114. Failure to perform and document this review is an example of an item of noncompliance pursuant to 10 CFR 50, Appendix B, Criterion V, and the Point Beach Quality Assurance Program as described in the FSAR Section 1.8.5, and PBNP 3.1.2 (266/83-21-08C).

Review of Modification Requests 82-51, relocation of the fuel oil line between the Emergency Diesel Generators and the 12,000 gallon emergency tank; 82-73, improve shielding around the reactor plant demineralizers by adding to an existing shield wall; 83-66, installation of shield wall close to reactor coolant filters; and 83-97, provide temporary electrical power for steam generator outage utilizing reactor coolant pump power leads, showed these were classified as non-nuclear safety related and no 10 CFR 50.59 safety evaluations were required consistent with the licensee's past practice. These systems are described in the FSAR and 10 CFR 50.59 requires a written safety evaluation for changes in the facility as described in the safety analysis report. Failure to perform and document safety evaluations for the above modifications is an item of noncompliance pursuant to 10 CFR 50.59 (266/83-21-14; 301/83-20-14).

Review of the jumper and lifted lead log revealed that the following had been performed without independent verification:

- 83-28, Unit 1 Component Cooling System Slides Opened on 10/11/83
- 83-29, Unit 1 Safety Injection System, lifted wires in cabinet 1324F-B on 10/11/83
- 83-37, Unit 2 Radiation Monitoring System, jumpered out flow switch on 10/20/83

The following was installed and removed without independent verification:

- 83-13, Unit 2 Safety Injection Valves 2MOV 841 A/B lifted control motor leads

ANSI N18.7-1976, Section 5.2.6, requires that these types of temporary modifications be independently verified. As discussed in Paragraph 3.d.(ii), there were no procedural requirements for independent verification of jumpers and lifted

leads. Failure to have procedural requirements and failure to perform independent verifications of temporary modifications is an example of an item of noncompliance pursuant to 10 CFR 50, Appendix B, Criterion V, the Quality Assurance program as described in Section 1.8 and 1.8.5 of the FSAR and ANSI 18.7 (266/83-21-08D; 305/83-20-08D).

Review of completed modification packages listed in Paragraph 3.e.(i) showed it to be difficult to track how the modifications were implemented and what documents were revised as a result of the modifications for the following reasons:

- The modification package normally did not identify how the modification was implemented. They did not reference Special Maintenance Procedures (SMP) or Maintenance Requests which may have been used, nor were these documents included in the modification history package.
- Section 11 of the modification form required a "Final Design Description" to be included on the form prior to implementation of the modification. In some cases the description was very short, did not reference drawings, or give a good description of the modification. For Modification Request 83-5 the description merely stated "Installed 3/8" Valck Mark II Valve".
- There was no identification in the modification package of the procedures that were revised, the drawings that were revised or the training that was accomplished as a result of the modification.
- Drawing and sketches included in the modification packages were not always positively identified to the appropriate modification request

In regard to the first and third items, the concerns of Paragraph 3.d.(ii) identified a weakness that there was no requirement for these items.

Other matters identified during the review of modification history packages were as follows:

- SMPs used to implement modification requests did not always provide adequate instruction to do the job. The following are examples:
  - Section 3.6 of SMP 425 used to implement Modification Request 82-13 stated "Weld flanges 1A, install plates and torque studs". There was no reference to an applicable drawing or weld procedure.

- Section 3.4 of SMP 427 for Modification Request M661 stated "Tie-in reactor coolant 995 vent to downstream side of RC-535 valve per approved drawing using approved weld procedure." The actual drawing and weld procedure were not identified.
- Section 3.6 of SMP 428 for Modification Request M661 stated "Connect reactor coolant gas vent to pressurize relief tank per approved drawing using approved welding procedure". The actual drawing and weld procedure were not identified. Also, the SMPs did not always reference the modification package they were written to implement.
- Safety evaluations for modifications were brief and sometimes without much documented basis. For example, the summary of the safety evaluation for Modification Request 82-114 stated in part "Manual valves will meet or exceed primary sample system specification". The basis for the statement was not provided in that the specification for the primary sample system and valve specification were not given.
- The licensee safety evaluation form was written in such a way it did not address all the requirements of 10 CFR 50.59(a)(2). It consisted of a checklist of review items and a summary. The Offsite Review Committee stated in the minutes of Meeting No. 27 (June 1982) that the documented safety evaluations for modifications is merely a checklist of items to be addressed and represented conclusions rather than a basis for conclusions of the safety evaluations. The committee recommended that the process be revised to identify those safety related aspects that could be potentially affected by the modification and then address the basis of why the modification was acceptable with respect to this potential.

The above items were discussed with licensee representatives and they agreed to take these items under consideration.

f. Calibration and Control of Test and Measuring Equipment

The calibration and control of test and measuring equipment was reviewed for conformance with procedure and regulatory requirements including equipment inventory, calibration frequency, calibration procedures, recall system, calibration status marking, and out of calibration controls.

(i) Documents Reviewed

- PBNP 6.1.2a, "Calibration Procedures (I&C) Record Content and Handling", Rev. 2.
- PBNP 6.1.2b, "Calibration Procedure Review and Approval Documentation", Rev. 2.
- PBNP 6.1.7, "Calibration and Control of Measuring and Test Equipment", Rev. 2.
- PBNP 5.5, "Control of Measuring and Test Equipment (Maint.)", Rev. 1.
- | <u>Calibration Procedure</u> | <u>Rev</u> | <u>Instrument</u>  |
|------------------------------|------------|--------------------|
| ICP 8.1                      | 0          | Rotameter          |
| ICP 8.2                      | 2          | Picoammeter        |
| ICP 8.3                      | 0          | Megohm Bridge      |
| ICP 8.21                     | 1          | Brush Recorder     |
| ICP 8.41                     | 3          | Vibration Meter    |
| ICP 8.60                     | 0          | Rotameter          |
| ICP 8.61                     | 4          | Digital Multimeter |

(ii) Results of Inspection

An inspection of equipment inventory and traceability revealed the following:

- The control system employed by the Instrument and Control (I&C) Department appeared to be acceptable.
- The Maintenance and Construction Department has no formal equipment inventory list although a handwritten draft of the torque wrench inventory was produced during the inspection.
- Maintenance and Construction Department micrometers are not marked with a unique identifying number and no traceability is maintained to NBS standards. (The lack of traceability was also identified by the May 1983 audit by Gilbert/Commonwealth as finding number 83-041.)
- The traceability of calibrations against certified equipment having known valid relationships to NBS standards appeared to be acceptable in the I&C area.

Pending the M&C Department implementation and NRC review of the corrective action response to the Gilbert/Commonwealth audit and formalization of an inventory control system, these items will remain as an unresolved item (266/83-21-15, 301/83-20-15).

The recall system and calibration frequency appeared to be acceptable for both the I&C and M&C Departments.

A review of calibration status marking revealed the following:

- Calibration status marking of I&C equipment appeared to be acceptable.
- Micrometers used by the maintenance group have no status marking (calibration stickers).

The lack of status marking on micrometers is a further example of lack of calibration control and will be tracked as an unresolved item pending implementation of the corrective action response to the Gilbert/Commonwealth audit finding 83-041 (266/83-21-16; 301/83-20-16).

A review of out-of-calibration controls revealed the following:

- The I&C group has a system employing usage cards for evaluating affected equipment if test and measuring equipment was found to be out-of-calibration.
- Three 0-600 ft-lb torque wrenches; #H57167, #E57167 and #E45984 were found to be out of calibration at their last calibration in the M&C Department. No documented evaluation was required by PBNP 5.5 nor was one made concerning the validity of work completed with these devices since the previous calibration.

The lack of a procedural requirement to perform an evaluation on M&TE found to be out of calibration is contrary to Section 5.2.16 of ANSI N18.7-1976 and is an example of a noncompliance with 10 CFR 50, Appendix B, Criterion V (266/83-21-08E; 301/83-20-08E).

g. Instrument Calibration

The instrument calibration system was inspected for conformance with Technical Specifications and regulatory requirements.



(i) Documents Reviewed

<u>Procedure</u>	<u>Revision</u>	<u>System</u>
ICP 5.17	Rev. 7	Reactor Coolant
ICP 4.14	Rev. 8	Boric Acid Control
ICP 6.17	Rev. 4	Safety Injection
ICP 4.1	Rev. 7	Containment Pressure
ICP 6.12	Rev. 3	Aux Feedwater

<u>Instrument Calibration Record</u>	<u>Date</u>
2PI-447	3/18/83
2PI-440	6/15/83
2PI-493	4/9/83
2PI-484	4/2/83
FR-110	4/18/83
YM-110	4/18/83
YM-111	4/18/83
PI-922	3/30/83
FI-924	3/30/83
PI-933A	3/25/83
2PI-945	1/29/83
2PI-946	1/29/83
2PI-950	1/19/83
PI-4013B	7/28/82
PI-4010B	7/27/82
2PI-4005	8/2/82

(ii) Results of Inspection

The following aspects of the instrument calibration system were examined:

- Calibration frequency
- Documentation
  - Completeness
  - Acceptance Criteria
  - Approved Revision Used
  - Technician Qualification
- Procedure Properly Approved
- Controls to Ensure LCOs are met



- Calibration Accuracy Requirements met
- As found and as left conditions documented
- Traceability
- Calibration sheets identify technicians
- Primary Standards
  - Control
  - Calibration frequency
  - Traceability of standards
  - Storage adequate
- Calibration System
  - Backlog

No items of noncompliance or deviations were identified.

h. Audit Program

The audit program was inspected for conformance with FSAR commitments and Technical Specification and regulatory requirements including:

- Qualification of audit personnel
- Audit training
- Maintenance of Proficiency
- Essential Elements of the Audit System
  - Delineation of authorities and responsibilities
  - Organizational independence and authority
  - Provisions for reporting on the effectiveness of the QA program
  - Access to levels of management that have the responsibility and authority to assure corrective action.

- Verification of effective corrective action on a timely basis
- Audit Scheduling
- Audit Implementation
  - Preparation
  - Written Plan
  - Notification
- Performance
  - Pre-audit and post-audit conferences
  - Audit Process
    - Checklists
    - Objective evidence
    - QA Program coverage
    - Deficiencies
    - Corrective Action
  - Reporting
    - Audit Scope
    - Identification of Auditors
    - Persons Contacted
    - Summary of Results
    - Evaluation Statement
  - Follow-up
  - Audit Records

(i) Documents Reviewed

- Point Beach Nuclear Plant Quality Assurance and Reliability Manual QA Volume II Section 18 - "Audits"
- PBNP 3.3.2, 05/06/83 - "Administration of Quality Assurance Audits", Rev. 2
- Final Safety Analysis Report for Point Beach Nuclear Plant Section 1.8.18 - "Audits". Rev. 1
- Quality Assurance Project Plan - WE Nuclear Related Internal Audits (1983)
- Point Beach Nuclear Plant Quality Assurance Audit Schedules dated October 10, 1983; April 29, 1983; and February 22, 1981
- Memo to File 21.3.6 - "PBNP Quality Assurance Program", dated December 12, 1980
- WZPCO corporate and Point Beach audits for 1981-1983

(ii) Results of Inspection

A review of Qualification of audit personnel, audit training, and maintenance of proficiency revealed the following:

- Auditors of the Quality Assurance Division (QAD) were found to be fully trained and qualified
- A member of the Nuclear Engineering Section (NES) audited QAD in 1981 and 1982 without having received documented audit training which was included as a finding in the G/C audit.
- In-plant auditors of the Point Beach Engineering, Quality and Regulatory Services (EQRS) have no documented evidence of audit training. They did appear competent to perform those audits they completed.
- Lead auditors of QAD were found to be properly certified.
- There was no appropriately trained lead auditor in the EQRS organization.

The failure of the EQRS to conduct audits with appropriately trained auditors under the direction of a designated lead auditor is contrary to ANSI 45.2.23, Section 1.8 of the FSAR, and is an example of a noncompliance with 10 CFR 50, Appendix B, Criterion XVIII (266/83-21-17A; 301/83-20-17A).

The inspector could find no clearly documented delineation of authority or responsibility between the QAD and EQRS in the area of audits. The licensee stated that this would be addressed in the revision to QA Volume II currently in progress. This is considered an open item pending completion of the revision to QA Volume II (266/83-21-18; 301/83-20-18).

Section 4.4.4 of ANSI 45.2.12-1976 requires that audit reports contain a summary of audit results including an evaluation statement regarding the effectiveness of the quality assurance program elements audited. The audit reports issued by the QAD did not consistently contain this evaluation. The audit reports issued by EQRS in general contain no evaluation statements. FSAR Section 1.8.18 states that "Technical Audits" are not performed under the requirements of ANSI 45.2.12. To the extent that EQRS audits are considered technical audits, the specific requirement for an evaluation statement does not apply although it is good practice. These statements provide one resource for management and independent review organizations in assessing the adequacy of the program. The failure of the QAD to consistently include evaluation statements in its audit reports is contrary to the requirements of ANSI 45.2.12 and is an example of a noncompliance with 10 CFR 50, Appendix B, Criterion XVIII (266/83-21-17B; 301/83-20-17B).

Verification of corrective action is not always accomplished in a timely manner by QAD. To date 8 findings from the April 15, 1982, audit of NES, one finding from the July 13-14, 1982, audit of Point Beach, 4 findings from the January 20-21, 1983, audit of Point Beach, and 3 findings from the February 24-25, 1983, audit of the Point Beach Emergency Plan remain open.

A review of audit scheduling indicated that QAD is implementing its schedule although some audits were performed late. The audit schedule of EQRS was not completed in 1981 or 1982 but appears to be on schedule since April 1983.

A review of audit implementation in the areas of preparation, written plans, and notification did not indicate any problems.

A review of audit performance and reports revealed the following:

- Audits by QAD were accomplished in accordance with written checklists and objective evidence was documented. Deficiencies were identified and corrective action was requested in writing.
- Audits by EQRS were accomplished in accordance with written checklists and objective evidence was documented; however, the quarterly audits of Operational Logs were not accomplished with written checklists but did reference procedures used. As of the October audits, deficiencies were identified and corrective action was being requested in writing using a new Audit Deficiency Report (ADR).

A review of audit follow-up indicated that out of ten QAD audits reviewed, 5 responses were late and one audit performed on July 21, 1983 had received no response. Of the responses to the 55 findings of the G/C audit, 23 were late by 27 to 56 days.

The failure to respond to audit findings within the 30 days required by ANSI N45.2.12 is an example of a noncompliance with 10 CFR 50, Appendix B, Criterion XVIII (266/83-21-17C; 301/83-20-17C).

The following items were identified as weaknesses:

- EQRs technical auditors have no documentation to support their qualifications to audit technical areas.
- Since EQRS auditors have no formally documented audit training, the audit procedure PBNP 3.3.2, Rev. 2, is not detailed enough.
- When audit responses were overdue or continue to be unacceptable there was no automatic escalation to higher levels of management to assure corrective action.
- Audits by QAD were not consistent in reporting of persons contacted and pre-audit and post-audit attendees.

- Comprehensive audits of the overall corrective action system and organization (Criteria II and XVI of 10 CFR 50, Appendix B) have not been performed in the last two years. Such audits are of value in assessing system effectiveness and adequacy in contrast to individual program elements.

These items will be pursued further during a subsequent inspection and are collectively considered an open item (266/83-21-19; 301/83-20-19).

i. Steam Generator Replacement Program

The Steam Generator Replace Program was reviewed for conformance with QA program commitments.

(i) Documents Reviewed

- Westinghouse NSID Steam Generator Replacement QA Program WCAP 9345
- Program Plan Supplement to SGRS program
- Audit of WCAP 9245 and SGRS Supplement by QAD, QA-83-280
- Audit of MK QA program by W, SGRS/V-01
- Site Quality Manual Index, 10/26/83
- Craft Training Module, Misc. 40
- WE audit plan for SGRP, QA-83-1157

(ii) Results of Inspection

The inspector reviewed the following elements:

- Pre-contract award audits by WE
- Pre-contract award audits by W
- QAD audit schedule for the SGRP
- SGRP indoctrination and training
- Subcontractor quality-related training
- Procedure approval by W SGRP



- Lead auditor certification
- ANSI N45.2.6 certification
- SNT-TC-1A certification
- Stop work authority

The following specific packages were reviewed:

- Lead auditor certification for four Westinghouse employees.
- Personnel indoctrination records for seven Westinghouse employees.
- QC inspector training for two Westinghouse employees.
- QC Inspector training for six Morrison-Knutson employees.

No items of noncompliance or deviations were identified.

j. Cleanliness Control

The inspector reviewed the commitments the licensee made for cleanliness and housekeeping in the Quality Assurance (QA) Program and Standing Order PBNP 4.12.10, "Operations Organization and Responsibilities", and reviewed the licensee's procedures to see if procedures had been issued to implement the QA program. The inspector also toured the plant to determine the effectiveness of the licensee's efforts.

(i) Documents Reviewed

- PBNP 4.12.10, "Operations Organization and Responsibilities", Rev. 15
- PBNP FSAR Section 1.8, "Quality Assurance Program", Rev. 1.

(ii) Results of Inspection

The inspector found while performing a walkthrough of the plants on October 11, 1983, that a general housekeeping problem existed throughout both plants as evidenced by:

- Several loose items were noticed on the Refueling Bridge (tools, lens caps, paper) while people were working over the refueling pool.
- Gum wrappers and candy wrappers were found in an area that was posted as no chewing or smoking for radiological purposes (i.e. Residual Heat Removal (RHR) Pump Room).

This is an item of noncompliance with 10 CFR 50, Appendix B, Criterion II which requires suitable cleanliness conditions for accomplishing activities affecting quality (266/83-21-20; 301/83-20-20). The inspector also noted cigarette butts laying on the floor of the 6½' level of the facade (both units), and around the A-Main Steam Isolation Valve for Unit 2. These areas were posted as no chewing or smoking areas for radiological purposes. The basement of the facade areas were in a general unclean condition with dirt, tape, radiological control swipes, and a respirator laying around. The licensee was informed of the inspectors findings on October 11, 1983, and took action to clean up the areas. A subsequent walkthrough of the plants on October 28, 1983, showed an improvement and no major problems were identified in the housekeeping and cleanliness areas of the plant at that time.

The inspector talked to maintenance personnel to determine the criteria or guidelines for conducting the "...final internal inspections of pressure vessels, tanks, etc...." as stated in the QA program. The inspector could find no program or any procedures requiring such inspections. Maintenance personnel felt that cleanliness and internal inspections were part of good shop practices. The licensee had no documentation of performing such inspections. A program identifying the guidelines or criteria for these inspections needs to be established which as a minimum, requires these inspections to be accomplished prior to reinstalling the Reactor Vessel Head, sealing safety related system after opening them, etc. The results of this inspection should also be documented identifying such things as (1) conditions encountered which were not anticipated, including nonconformances, (2) identity of inspector or tester, (3) completion date of the test. The licensee has taken exception to this documentation in the QA Program. This is an unresolved item pending further review by the inspector (256/83-21-21; 301/83-20-21).

k. Document Control

The licensee's document control program was reviewed to evaluate its implementation and compliance with the requirements of 10 CFR 50, Appendix B, Criterion VI, and the QA Program.

The following items were considered during this review: administrative controls have been established for the control of drawings including the revision of drawings; the preparation of new drawings and the assignment of responsibilities; and master indices have been established for drawings, manuals, technical specifications, FSAR and procedures. Selected documents and drawings in controlled files were reviewed to verify that current revision were contained in the files.

(i) Documents Reviewed

PBNP 2.2.4, "Drawing Change Procedure", Rev. 25

PBNP 2.11, "Classification, Review and Approval of Procedures", Rev. 1

PBNP 6.1.2.c, "Revision Control (Instrumentation and Control)", Rev. 1

NES 4.5, "Technical Specification Changes and License Amendments", June 1, 1981

NES 4.4, "Final Facility Description and Safety Analysis Report (FFDSAR) Amendments", June 1, 1981

QAI: 3, "Q.A. Instruction Preparation, Revision, Issue and Control", Rev. 4

PBNP 2.2.3, "Component Instrumentation Manuals", Rev. 6

PBNP 5.1.1, "Routine Maintenance Procedures", Rev. 2

PBNP 5.1.2, "Special Maintenance Procedures", Rev. 4

PBNP 5.1.3, "Preventive Maintenance Procedures", Rev. 1

Standing Order 4.12.10, "Operations Organization and Responsibilities", Rev. 15

Standing Order 4.12.12, "Procedure/Drawing Revisions", Rev. 1

PBNP 2.1.2, "Periodic Procedure Review", Rev. 1

Drawing Change Notice (DCN) 83-43 to Drawing M-201, Sheet 1

DCN 83-43 to Drawing M-201, Sheet 2

DCN 83-78 to Drawing M-207, Sheet 1

DCN 83-89 to Drawing M-201, Sheet 1

DCN 83-137 to Drawing M-207, Sheet 1

Refueling Procedures:

RP-3B, "Fuel Assembly Sipping", Rev. 2

RP-5B, "NLI- $\frac{1}{2}$  Spent Fuel Shipping Cask Handling and Unloading",  
Rev. 4

Operating Procedures:

OP-1C, "Low Power Operation to Normal Power Operations", Rev. 19

OP-2A, "Normal Power Operation", Rev. 1

OP-3A, "Normal Power Operation to Low Power Operation", Rev. 10

OP-4D, "Draining the Reactor Coolant System", Rev. 19

OP-6A, "Operation of Component Cooling System", Rev. 6

OP-7A, "Placing Residual Heat Removal System in Operation",  
Rev. 19

OP-13A, "Secondary System Startup and Shutdown", Rev. 25

Operating Instruction OI-58, "Leak Testing of Containment  
Isolation Valves", Rev. 6

Instrument and Control Procedures:

ICP 2.3, "Reactor Protection Logic", Rev. 9

ICP 2.9, "Intermediate Range Nuclear Instrumentation", Rev. 2

ICP 2.10, "Source Range Nuclear Instrumentation", Rev. 5

ICP 2.14, "Power Range Nuclear Instrumentation", Rev. 1

ICP 2.15, "Reactor Protection System Logic", Rev. 9 (Unit 1), Rev. 0 (Unit 2)

ICP 2.18, "NBFD Relay Inspection", Rev. 2

ICP 10.2, "Reactor Protection and Safeguards Analog Channel Maintenance", Rev. 7

ICP 10.7, "Bypass of Lo-Lo Steam Pressure Safety Injection Signal", Rev. 2

Completed surveillance procedures:

PT-M-1, "Station Batteries"

PT-M-2, "Degraded and Loss of Voltage Relay Testing, Unit 2"

PT-M-3, "Degraded and Loss of Voltage Relay Testing, Unit 2"

PT-R-2, "Hydraulic Snubber Inspection"

PT-R-3, "Unit 1/2 Containment Hanger Inspection"

PT-R-5, "Battery (D05) Service Test"

PT-R-6, "Battery (D06) Service Test"

PT-18-2, "Diesel Fire Pump Engine Inspection"

ICP 2.1, "Reactor Protection and Safeguards Analog (Long Form)", Rev. 23 (Unit 1), Rev. 25 (Unit 2)

ICP 2.2, "Reactor Protection and Safeguard Analog (Short Form)", Rev. 16 (Unit 1), Rev. 17 (Unit 2)

ICP 2.3, "Reactor Protection Logic", Rev. 9

ICP 2.8, "Power Range Axial Offset", Rev. 9

(ii) Results of Inspection

The results of the review revealed a general lack of control of documents. 10 CFR Part 50, Appendix B, Criterion VI, states in part: "Measures shall be established to control the issuance of documents, ... These measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel and are distributed to and used in the location where the prescribed activity is performed."

The QA Program commits the licensee to ANSI 18.7-1976. ANSI 18.7-1976, Section 5.2.15 states, in part, "Participating organization shall have procedures for control of the documents and changes thereto to preclude the possibility of use of outdated or inappropriate documents. Document control measures shall provide for:...(4) Ascertaining that proper documents are being used...(5) Establishing current and updated distribution lists." The following are examples where this did not occur:

PT-M-1 (Maintenance Surveillance) was performed on Batteries D05 and D06 7/31/75 through 10/31/75 to Revision 0 in lieu of Revision 1 which was issued 7/9/75.

PT-M-1 (Maintenance Surveillance) was performed on Battery D06 on 9/30/83 to Revision 1 in lieu of Revision 3 which was issued 9/23/83.

This is contrary to 10 CFR Part 50, Appendix B, Criterion VI. This is an example of an item of noncompliance (266/83-21-22A; 301/83-20-22A).

PBNP 2.2.4 paragraph 3.5 requires that a DCN be attached to the drawing or the drawing marked up to agree with the DCN and noted on the drawing that the DCN was incorporated. The following DCNs were found not incorporated into the drawings located in the Control Room, Auxiliary Feedwater Pump Room, and Auxiliary Building (i.e., locations where operations personnel would expect to find up-to-date documents):

DCN 83-43 to Drawing M-201, Sheet 1, was not incorporated.

DCN 83-78 to Drawing M-207, Sheet 1, was not incorporated.

This is an example of an item of noncompliance with 10 CFR 50, Appendix B, Criterion VI (266/83-21-22B; 301/83-20-22B).

The following procedures were found in the Control Room in accordance with procedure PBNP 6.1.2.c; however, they were not the latest revision:

<u>Procedure</u>	<u>Revision in Control Room</u>	<u>Latest Revision</u>
ICP 2.3	Rev. 3 dated 12/22/82	Rev. 9, 6/29/83
ICP 2.15	Rev. 6 dated 12/17/82	Unit 1, Rev. 9 8/16/83 Unit 2, Rev. 0 8/16/83
ICP 10.2	Rev. 6 dated 1/29/82	Rev. 7, 10/19/83

This is an example of an item of noncompliance with 10 CFR 50, Appendix B, Criterion VI (266/83-21-22C; 301/83-20-22C).



The Maintenance Department did not maintain indices for its procedures, or have any other document control measures to assure that proper documents were being used as required by ANSI 18.7-1976 and 10 CFR 50 Appendix B, Criterion VI. The method the inspector used to acquire the latest maintenance procedure was to ask Staff-Services for the latest procedure. If it had been changed in the last few years, Staff-Services would have the latest procedure. If Staff-Services did not have the procedure, the inspector returned to the Maintenance Office and by searching in the master file obtain the latest revision to a procedure. The shop assumed that the last revision in the master file was not out-of-date due to actually misfiling or removal from the file. This was the case for procedures which had not been changed in the last few years and which Staff-Services had control. This is an example of an item of noncompliance with 10 CFR 50, Appendix B, Criterion VI (266/83-21-22D; 301/83-20-22D).

The Instrument and Control Department did not update the drawing in the shop when a DCN was issued. The DCNs were filed in a three-ring binder as they were received and the drawings were not annotated as to the existing change. This is contrary to 10 CFR 50, Appendix B, Criterion VI, ANSI 18.7-1976, and Administrative Procedure PBNP 2.2.4. This is an example of an item of noncompliance with 10 CFR 50, Appendix B, Criterion VI (266/83-21-22E; 301/83-20-22E).

The above noncompliances related to document control appeared to be attributable in part to lack of detailed instructions and assignments of the responsibility for incorporation of document changes (i.e. DCNs, procedure changes, etc.) to individuals.

The inspector also identified that the biennial review of procedures required by ANSI 18.7-1976 and implemented by PBNP 2.1.2, was not being accomplished or documented. All departments lacked this review including Operations, Maintenance, I&C, Nuclear Engineering Section, etc. This noncompliance was identified in the Gilbert and Commonwealth audit. The licensee is taking action based on that audit finding. Because this was identified by the licensee and the licensee was taking corrective action this item is considered unresolved pending completion of corrective action (266/83-21-23; 301/83-20-23).

The licensee's practice of using the "in-use" method of reviewing procedures does not meet all of the intent for this biennial review. "In-use" review criteria according to PBNP 2.1.2 would be by "means of including actual performance of the procedure or a substantial portion of the procedure, review for training or requalification purposes." This type of review

would not identify a need for a procedure change due to such reasons as regulatory changes (i.e., 10 CFR, FSAR, TS, etc.), changes to codes, standards, etc., experiences at the facility, or changes at the facility (i.e. management position, responsibilities, reportability, etc.).

The inspector was also concerned that the first page of the procedures is the only page that identifies the revision number, and the issue date of the procedure. The accompanying pages of the procedure only lists the page number and document number without any reference to revision or issue date. Should the cover sheet become detached from the document, there is no method for determining if the latest pages of the procedure or the accompanying data sheets are in use without the issue date or the revision number on the accompanying pages. The licensee stated that its position was that no procedure was to be used unless all pages were included. The inspector had no further questions and the item is considered closed.

#### 1. Off-site Review Committee

The activities of the Off-site Review Committee were inspected to determine if they were conducted in accordance with the Technical Specifications and committed standards.

##### (i) Documents Reviewed

- PBNP Technical Specifications, Section 15.6.5.3, "Off-site Review Committee"
- Off-site Review Committee Meeting Minutes for meetings numbered 24 (November 1980) through 29 (May 1983)
- Point Beach Nuclear Plant Off-site Review Committee Review and Audit Plan, October 4, 1983
- Charter of Point Beach Nuclear Plant Off-site Review Committee, Draft dated 10-5-83.

##### (ii) Results of Inspection

The Off-site Review Committee (OSRC) consisted of five members. The Committee met twice each year for ~ 3 days. Telephone meetings were held to discuss specific subjects. The OSRC did not currently have a charter other than Section 15.6.5.3 of the Technical Specifications. A draft charter was under review.

Technical Specification 15.6.5.3.8.(a) requires that audits be performed under the cognizance of the OSRC encompassing the conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per year. It has been the custom for the OSRC members to perform these audits during the semi-annual meetings. A review of the OSRC minutes from November 1980 through May 1983 revealed that not all provisions of the Technical Specifications were being audited. Specifically, no audits have been performed on the requirements of Section 15.6, "Administrative Controls", Section 15.2, "Safety Limits and Limiting Safety System Settings", Section 15.5, "Design Features". Audits of Section 15.3 "Limiting Conditions For Operations", have been limited to Subsections 15.3.1, "Reactor Coolant System", and 15.3.10, "Control Rod and Power Distribution Limits". Further, the OSRC Review and Audit Plan dated October 4, 1983, covering the period Fall 1983 through Spring 1986 specifically noted that Sections 15.6 and 15.3 were not included (although three subsections of Section 15.3 were included in the attached tabulation). The plan suggested that significant violations in those areas would be reviewed as part of the OSRC normal review function. This does not constitute an audit. The failure of the OSRC to audit all provisions of the Technical Specifications is considered an example of a violation of the Technical Specification 15.6.5.3.8 (266/83-21-24A; 301/83-20-24A).

It is the NRC position that an organized written plan or matrix should exist which identifies all applicable Technical Specification line items to be audited. During each 12 month period, a selected sample of line items in each of the 5 major sections of the Technical Specifications are to be audited and audits scheduled such that all applicable line items in the Technical Specification will be examined by the auditing organizations within a specified period of time. The time period is to be determined by the licensee and will be subject to NRC review. The period should be based on the history of Technical Specification compliance and the audit frequency should be increased or decreased accordingly and the plan or matrix should be routinely updated to accurately reflect the status of the audit program.

Technical Specification 15.6.5.3.8 (c) requires audits to be performed under the cognizance of the OSRC of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or method of operation that affect nuclear safety at least twice per year. A review of the OSRC meeting minutes from November 1980 through May 1983 indicated that no audits had been performed in this area. The OSRC Review and Audit Plan for Fall 1983 through Spring 1986 noted

that audits in this area could be accomplished by means of discussions with responsible staff members. This does not constitute an audit. The failure to perform audits in this area is considered an example of a violation of the Technical Specification 15.6.5.3.8 (266/83-21-24B; 301/83-20-24B).

Section 1.8 (Quality Assurance Program) of the FSAR states that the PBNP QA Program commits to the guidance provided in ANSI 18.7-1976 which includes commitment (with exceptions noted) to ANSI 45.2.12 (Draft 4, Rev. 2), "Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants". The OSRC audits are not conducted in accordance with this standard in that:

- There is no documented audit training of OSRC members as required by Sections 2.3 and 5.3 of the standard. However, there was no question relative to the technical competence of the auditors.
- Records of audits performed are not generated or maintained in accordance with Sections 4.4 and 5.2. No audit reports are issued (results of audits are summarized in the meeting minutes). Audit records (checklists, procedures, etc.) were not maintained.

The failure of the OSRC to conduct its audits in accordance with ANSI N45.2.12 as committed in Section 1.8 of the FSAR is an example of a violation of 10 CFR 50, Appendix B, Criterion XVIII (266/83-21-17D; 301/83-20-17D).

There were several weaknesses noted in the conduct of OSRC activities:

- The OSRC is required (TS 15.6.5.3.7 (d)) to review proposed TS or license changes. This review may in fact be conducted concurrent with NRC review and approval. This could lead to an NRC approved change prior to OSRC input or comment.
- The audits required by the TS to be conducted under the cognizance of the OSRC were conducted exclusively by the members. While the participation of OSRC members in these audits was a significant strength, the exclusive use of OSRC members precludes reasonably comprehensive coverage of all Technical Specifications and other required audits in a reasonable period of time. The OSRC is staffed by senior level personnel and provides a good overview of plant activities. Cognizance of these activities is maintained, in part, by the review of the

minutes of the Manager's Supervisory Staff meetings and onsite reviews during the OSRC semiannual meetings. However, as discussed above the OSRC is not conducting the total audit program required by the Technical Specifications. The use of the QAD, EQRS and perhaps subcommittees to perform these audits under the cognizance of the OSRC would permit the audit program to be implemented in a comprehensive manner without diluting other OSRC activities including participation in audit activities during the onsite meetings.

- Open items (tracked via meeting minutes) were occasionally closed prior to completion and evaluation of corrective actions. For example, Item 20 of the minutes of the meeting held on May 15-17, 1983, was closed on the basis that a modification had been submitted. This removed any tracking mechanism for followup on the adequacy of the corrective action.
- The OSRC had no charter (other than the TS) or procedures for the conduct of its activities (e.g. conduct of audits, audit program planning, provisions for providing minority reports, etc.). A draft charter was in the review process which did provide some procedural guidance.

These weaknesses are considered an open item and will be reviewed further in a future inspection (266/83-21-25; 301/83-20-25).

m. Procurement

The licensee's procurement program was inspected to determine if it was in compliance with regulatory requirements and the QA Program including committed Regulatory Guides and Standards.

(i) Documents Reviewed

- QAI PB-1, "Qualification of Suppliers for Point Beach Nuclear Plant", Rev. 3
- QAI PB-1.1, "Evaluation of Prime Contractors and Major Suppliers", Rev. 0
- QAI PB-1.2, "Evaluation of Suppliers of Industrial and Commercial Grade Items", Rev. 0
- QAI PB-1.3, "Evaluation of Suppliers of Fire Protection Equipment and Services", Rev. 0
- QAI PB-1.4, "Evaluation of Distributors", Rev. 0
- QAI PB-1.5, "Evaluation of Sales Offices", Rev. 0



- PAI PB-4, "Control of Procurement Documents for PBNP", Rev. 0
- QAI PB-6, "Release of QA Scope Materials and Equipment for PBNP", Rev. 0
- QAI PB-8.1, "Procurement of Environmentally Qualified Electrical Equipment", Rev. 0
- QAI PB-8.2, "Acceptance of Environmentally Qualified Equipment", Rev. 0
- QAI PB-8.3, "Review of Environmental Qualification Test Plans and Reports", Rev. 0
- Point Beach Nuclear Plant Quality Assurance and Reliability Manual, QA Volume II, Section 4, "Procurement Document Control", Rev. 4
- PBNP 3.3.1, "Administration of Hardware Quality Assurance", Rev. 12
- PBNP 6.1.1, "Spare Parts and Modification Parts (Instrument and Control)", Rev. 4
- Receiving Documentation - P.O. Number (QA Release No.)
  - A-14631 (1567)
  - A-59733 (2257)
  - A-60986 (2187)
  - A-97825 (2636)
  - A-72309 (540)
  - A-62908 (2296)
  - B-19457-P (3063)
  - A-104559-5 (2908)
  - A-76055 (2489)
  - A-67978 (2228)

(ii) Results of Inspection

The licensee has no established program for shelf-life control for items in the PBNP Ready Stores. This is in noncompliance with 10 CFR 50, Appendix B, Criterion XV (266/83-21-26; 301/83-20-26). The licensee stated that a program had been drafted and was in the review process. However, considering that the item was originally identified in April 1981 during a previous NRC inspection, corrective action has not been timely.



Other items of potential noncompliance and procurement program deficiencies were included as findings in the G/C audit (see Paragraph 3.a.(ii)). These findings and finding numbers are listed below.

- 83-003 - Failure to route all purchase requests initiated by the Nuclear Engineering Section through the Quality Assurance Division for review as required by FSAR Section 1.8.7.
- 83-009 - Failure to post 10 CFR 21 requirements and procedures for reporting in the Purchasing Department.
- 83-011 - Lack of Procurement Department procedures concerning the generation and maintenance of quality related records as required by FSAR Section 1.8.17.
- 83-012 - Inability to assure that adequate quality requirements are included, referenced, or attached to procurement documents (especially 10 CFR 21 requirements).
- 83-026 - Lack of QAD Receipt Inspection procedures or instructions as required by FSAR Section 1.8.7.
- 83-046 - Lack of receiving inspection procedures for receipt of QA scope items at PBNP Ready Stores.
- 83-050 - Receiving inspection documentation of I&C equipment is not documented as required by FSAR Section 1.8.10.

An evaluation of the corrective action responses to these findings revealed the following shortcomings:

- 83-012 - Preventing future problems was addressed. However, the response did not address assuring that currently open purchase orders contain adequate quality requirements or that items currently in stock were procured with adequate quality requirements.
- 83-026 - No date was committed for completion of the training program or issuance of procedures/instructions.
- 83-046 - No date was committed for completion of corrective action implementation.
- 83-050 - No date was committed for corrective action implementation.

The lack of commitment dates in the 83-046 and 83-050 responses are derivative at least in part to the lack of a completion date for 83-026.

In accordance with NRC enforcement policy, those procurement program findings identified by the G/C audit will not be pursued as items of noncompliance at this time but will be considered an unresolved item pending complete and timely corrective action by the licensee (266/83-21-27; 301/83-20-27).

n. Surveillance and Inservice Testing

The inservice testing and surveillance programs were inspected to determine if the programs and their implementation were in compliance with the Technical Specifications and committed ASME Section XI Inservice Testing Program.

(i) Documents Reviewed

- PBNP 4.12.17, Standing Order, "Inservice Testing", Rev. 3
- PBNP 4.10, "Operations Group Periodic Testing and Surveillance", Rev. 6
- PBNP 3.2.1, "Technical Specification Surveillance", Rev. 12
- TS-10A, "Technical Specification Surveillance Containment Airlock Door Seal Testing", Rev. 2
- ORT #5, "Sump 'B' to RHR Pump Suction Valves Hydro and Isolation Valve Leak Test", Rev. 7
- ORT #3, "Safety Injection Actuation with Loss of Engineered Safeguards AC", Rev. 12
- ORT #2, "Flow Test of Low Head SI Pumps", Rev. 6
- IT-03, "Inservice Testing of Low Head Safety Injection Pumps (RHR)", Rev. 9
- IT-06, "Inservice Testing of Spray Pumps and Educator Supply Check Valves 347A&B", Rev. 6
- IT-07, "IST and Rotation of Service Water Pumps P32A-F", Rev. 4
- IT-40, "IST of SI Valves", Rev. 7

- RF-10, "Safety and Relief Valve Testing Callup Procedure", Rev. 0
- ICP 2.1, "Periodic Test of Reactor Protection and Safeguards Analog Channels I through IV", Rev. 23
- ICP 4.1, "Calibration Procedure (Refueling, Tech Spec)", Rev. 8
- ICP 4.2, "Calibration Procedure for Flow Transmitters", Rev. 2
- ICP 2.7, "Biweekly Instrumentation Power Range Test", Rev. 9
- ICP 2.13, "Periodic Test of 4160V Undervoltage", Rev. 3
- Unit 2 Control Room Shift Log.
- Safeguards Shift Log.

(ii) Inspection Results

A review of test records indicated that tests are being performed in accordance with required schedules. Surveillance and test status is called up daily via a computer which provides an effective tracking/scheduling system. Trending is accomplished through the use of log books in which the engineer in charge records the results and compares them to previous test data.

No items of noncompliance or deviation were identified.

4. Open Items

Open items are matters which have been discussed with the licensee which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items disclosed during the inspection are discussed in Paragraphs 3.a.(ii), 3.b.(ii), 3.c.(ii), 3.d.(ii), 3.h.(ii), 3.k.(ii), and 3.l.(ii).

5. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during the inspection are discussed in Paragraphs 3.a.(ii), 3.f.(ii), 3.j.(ii), 3.k.(ii) and 3.m.(ii).

6. Management Meeting

On January 4, 1984, the inspectors and members of Region III management met with licensee representatives (denoted in Paragraph 1) at the licensee's request and further discussed findings of the inspection and some of the licensee corrective actions.

7. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on November 16, 1983, and summarized the purpose, scope, and findings of the inspection.