Wisconsin Electric POWER COMPANY
231 W. MICHIGAN, P.O. BOX 2046, MILWAUKEE, WI 53201
(414) 221-2345

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U. S. NUCLEAR REGULATORY COMMISSION
Document Control Desk
Washington, D. C. 20555

Gentlemen:

DOCKETS 50-266 AND 50-301
SUBMITTAL OF QUALITY ASSURANCE
PROGRAM DESCRIPTION CHANGES
POINT BEACH NUCLEAR PLANT - UNITS 1 AND 2

In accordance with the requirements of 10 CFR 50.54 (a)(3), Wisconsin Electric Power Company is submitting the latest revisions to Section 1.8 of the Final Safety Analysis Report (FSAR) for Point Beach Nuclear Plant (PBNP). Section 1.8 of the FSAR describes the present Quality Assurance Program implemented for PBNP. This section was last submitted to the NRC on June 27, 1986. Changes to the program description since that time are highlighted in the attachment and discussion below.

None of the changes are considered to be reductions in Quality Assurance Program commitments previously accepted by the NRC, with the possible exception of Item M. This item which involves the retention of radiographs is further discussed later. Many of the changes are editorial, provide clarification, or are made to reflect the current organizational structure.

Changes as of June 1987 are summarized as follows:

A. Page 1 8-1, Paragraph 1 - The description of 10 CFR 71, Subpart H, has been corrected to read, "Quality Assurance for Packaging and Transportation of Radioactive Material." This agrees with the actual title of Subpart H.

B. Page 1.8-3, Paragraph 2 - The second sentence was changed to read, "...performed by company organizations..." for clarification.

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ADD: NRR/DLPQ/QAB

C. Page 1.8-5, Paragraph 1 - Add the following sentence to the end of the paragraph: "He is also responsible for verifiying the adequacy and implementation of the QA program for Point Beach Nuclear Plant."

D. Page 1.8-7, Paragraph 3 - Replace "the QA Volume I" with "PBNP QA Volume I."

E. Page 1.8-7, Paragraph 4 - Change, "The manual is reviewed and approved ... " to read, "The policies in this manual are approved ... ", to better describe actual practice.

F. Page 1.8-7, Paragraph 6 - Add "PBNP" in front of the title of QA Volume I.

G. Page 1.8-12, Paragraph 2 - Change the second sentence to read, " ... the Duty Shift Superintendent who holds a senior operator's license.", to reflect the correct position title.

H. Page 1.8-12, Paragraph 2 - Change the fourth sentence to read, " ... Reactor Engineering, Chemistry, and Health Physics procedures, approval is not required from the Duty Shift Superintendent for temporary changes." This change is to note the separation between the Chemistry and Health Physics organizations and to reflect the correct position title.

I. Page 1.8-17, Paragraph 3 - Change the sentence to read, " ... editions of ASNT Recommended Practice No. SNT-TC-1A.", to better define the standard used for qualification of NDE personnel.

J. Page 1.8-18, Paragraph 2 - Add a period (.) after "performing the calibration." Then next sentence should read, "Procedures require that standards used ... ", for clarification.

K. Page 1.8-19, Paragraph 4 - The first sentence should be changed to read, "Maintenance/Work Requests identify and control nonconforming items requiring repair ... ", to correctly reflect the current name of the requests.

L. Page 1.8-20, Paragraph 1 - Change "QA Section" to read, "Nuclear Power Department" to reflect the department procedure for nonconformances.

M. Page 1.8-20, Paragraph 4 - Add the following paragraph after the first sentence:

"Radiographs are retained as nonpermanent records for a minimum of ten years after the date of the radiograph. Associated radiographic review records are permanently retained and provide necessary weld quality/acceptance information."

Table 1.8-1, Item 11: Add the following sentence:

"The Point Beach policy for the retention of radiographs and associated review records is outlined in Section 1.8.17.2."

Regulatory Guides and standards more current than ANSI N45.2.9-1974 and NFPA 232-1970, such as NQA-1 (1983) and Reg. Guide 1.28, revision 3, appear to recognize the limited life of radiographs. All of these accepted industry standards exclude radiographs from the list of records to be retained for the life of the equipment or facility. Three to ten years is referenced as the minimum retention period.

Radiographic review records (reader sheets) document the results and acceptability of radiographic examination. Any indications identified are recorded on these sheets and are evaluated to establish acceptability of the weld, component or system. While radiographic examination is performed on a media which lends itself to hardcopy storage more easily than other forms of NDE, our past experience has been that radiographs generally do not provide any more meaningful data than that already provided on the review records.

In view of the above considerations, we believe that lifetime storage and retention of radiographs is not justified. However, as stated above, radiographic review records will continue to be maintained as lifetime records in accordance with our original commitment.

We intend to include the modified pages of Section 1.8 in our next FSAR update which we expect to submit this fall.

If you have any questions in regard to the above discussion or the attached information, please contact us.

Very truly yours,

C. W. Fay
Vice President
Nuclear Power

Attachments

Copies to NRC Resident Inspector
NRC Regional Administrator,
Office of Inspection and Enforcement, Region III

1.8 QUALITY ASSURANCE PROGRAM

In accordance with Paragraph 50.34 of 10 CFR 50 and 71.24 of 10 CFR 71, a Nuclear Quality Assurance Program Description is provided by Wisconsin Electric Power Company (WE). This Program assures that the required manpower, procedures, and management of Point Beach Nuclear Plant are directed toward satisfying the Company objectives of providing safe and reliable structures, systems, and components; and complying with the provisions of 10 CFR 50, Appendix B "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"; 10 CFR 71, Subpart H "Quality Assurance for Packaging and Transportation of Radioactive Material"; and the applicable Sections of the ASME Boiler and Pressure Vessel Code. The program described is structured in accordance with the 18 criteria of Appendix B.

The following describes the quality assurance program established and imposed by the Company for application to the functional aspects of structures, systems, components, including the design, purchasing, construction, and fabrication, handling, storage, shipping, cleaning, installation, erection, inspection, testing, operation, maintenance, refueling, repair, and modification of equipment considered significant to safety by the Company. These structures, systems, and components may be classified as safety-related in that they prevent or mitigate the consequences of postulated accidents, or as in the case of radioactive material packaging and fire protection, they may contribute to causing undue risk to the health and safety of the public or loss of services should they fail or malfunction. Structures, systems, and components not classified as safety-related items are controlled as necessary to provide assurance of quality commensurate with the importance of the function(s) to be performed.

The principal objectives of the quality assurance program and the key functions and elements which it contains are not expected to change. However, circumstances may make advisable changes in the organization or in the implementing detail necessary, and such changes will be made in accordance with established procedures. Changes in the quality assurance program description will also be submitted to the NRC as required by 10 CFR 50.54.

The Point Beach Nuclear Plant Quality Assurance Program commits to the guidance provided in ANSI N18.7-1976, except as specifically noted. Where exceptions are noted in the text of this section, the PBNP alternative system is discussed. Commitment to ANSI N18.7-1976 includes either complete or partial commitment to the following additional standards:

ANSI N18.1-1971	Selection and Training of Nuclear Power Plant Personnel
ANSI N18.17-1973	Industrial Security for Nuclear Power Plants
ANSI N45.2.1-1973	Cleaning of Fluid Systems and Associated Components for Nuclear Power Plants.
ANSI N45.2.2-1972	Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants (During the Construction Phase)
ANSI N45.2.3-1973	Housekeeping During the Construction Phase of Nuclear Power Plants
ANSI N45.2.4-1972	Installation, Inspection, and Testing Requirements for Instrumentation and Electric Equipment During the Construction of Nuclear Power Generating Stations
ANSI N45.2.5-1974	Supplementary Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants
ANSI N45.2.6-1973	Qualification of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants

ANSI N45.2.8-1975	Supplementary Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems for the Construction Phase of Nuclear Power Plants
ANSI N45.2.9-1974	Requirements for Collection, Storage, and Main tenance of Quality Assurance Records for Nuclear Power Plants
ANSI N45.2.10-1973	Quality Assurance Terms and Definitions
ANSI N45.2.11-1974	Quality Assurance Requirements for the Design of Nuclear Power Plants
ANSI N45.2.12, Draft 4, Rev.2	Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants
ANSI N45.2.13-1976	Quality Assurance Requirements for Control of Procurement Items and Services for Nuclear Power Plants
ANSI N101.4-1972	Quality Assurance for Protective Coatings Applied to Nuclear Facilities

To the extent required by ANSI N18.7-1976 as hereinafter specifically noted, PBNP hereby commits to the above standards. Table 1.8-1 provides further information regarding commitments to regulatory guides and related standards.

1.8.1 ORGANIZATION

The authorities and responsibilities of persons and organizations performing quality related activities are established, assigned, and documented in a formal system. All quality assurance and quality control functions are performed by Company organizations (including both on-site and off-site personnel) except when the scope of specific projects dictate the need to engage contractors to perform specific services or as otherwise noted.

Those persons and organizations assigned such functions are given appropriate and sufficient authority and organizational freedom to identify quality problems; verify implementation of the solutions; and prevent further processing, delivery, installation, or use of nonconforming items until proper dispositioning has occurred.

The organizational structure and functional responsibility assignments are such that: (1) attainment of quality objectives is accomplished by individuals assigned responsibility for specifying quality or performing work to specifications, (2) audits verifying conformance to established quality requirements are accomplished by those who do not have direct responsibility for performing the work being verified, and (3) personnel in key quality assurance functions have direct access to responsible management. The education and experience required of individuals assigned to QA positions is documented and approved by management.

The operating organization is reflected in Figure 15.6.2-2 of the Technical Specifications. The organization for quality assurance is reflected in Figures 1.8-1, 1.8-2, 1.8-3, and 1.8-4. The Vice President-Nuclear Power Department, who reports directly to the President, has been delegated the authority by the President to establish quality assurance policies, goals, and objectives as applicable to the Point Beach Nuclear Plant and the Nuclear Power Department although the President retains ultimate responsibility.

Manager - Point Beach Nuclear Plant

The Manager-Point Beach Nuclear Plant is the senior company representative at the plant facility and, as such, is in direct day-to-day control of all normal plant administration, technical operations and quality assurance. The Quality Assurance Coordinator reports to the Manager-Point Beach Nuclear Plant on quality-related matters. Quality Assurance Representatives report to the Quality Assurance Coordinator as members of the Quality, Standards & Records Organization as shown in Figure 1.8-3. The QA Coordinator and the QA Representatives (including participation on the Quality Standards, & Records Organization) are concurrent assignments.

General Superintendent of Quality Assurance

The General Superintendent of Qualtity Assurance reports to the Vice President-Nuclear Power Department. He is responsible for integrating the quality assurance program within the company including providing off-site quality assurance support for Point Beach. He is also responsible for verifying the adequacy and implementation of the QA Program for Point Beach Nuclear Plant.

Quality Assurance Committee

The Wisconsin Electric Quality Assurance Committee consists of Company officers and an outside consultant each designated by the President. The Quality Assurance committee assesses the adequacy and effectiveness of the Quality Assurance Program by reviewing quality assurance policies, procedures, and practices and through periodic initiation of audits. The Chairman of the Committee is appointed by the President. The Committee meets on a periodic basis, normally quarterly, but no less than three times per year to review the status and adequacy of quality-related activities.

Off-Site Review Committee

The Off-site Review Committee (OSRC) is established in accordance with Technical Specifications, Section 15.6.5.3. The OSRC selectively reviews designated activities involving the operation of Point Beach Nuclear Plant including Technical Specification compliance. Specific duties and responsibilities are described in the plant Technical Specifications, Section 15.6.5.3.

General Responsibilities

The responsibilities of individuals or groups performing QA functions are documented and approved by management. General responsibilities are as follows:

QA Coordinator

1. Assist plant groups on matters dealing with quality, codes and standards interpretation, interpretation and applica-

tion of the in-plant quality assurance manuals, regulatory record keeping and regulatory inspection activities.

2. Administer the in-plant quality assurance and control aspects of ordering, storage, usage, and documentation of quality assurance spare parts and equipment in the plant.
3. Perform technical audits of plant groups with respect to the adequacy and implementation of quality assurance procedures and instructions and the adequacy of documentation (Section 1.8.18).
4. Provide plant control of corrective action required due to observed documentation or physical infractions of the Quality Assurance Program.

QA Representative

1. Report to the QA Coordinator observed documentation or physical infractions of quality assurance procedures and instructions or suspected violations of Technical Specification, State and Federal codes or standards, and commitments to Regulatory Guide positions.
2. Assist their respective groups in conforming with QA policies and procedures including: Operating Point Beach Nuclear Plant Administrative Control Policies and Procedures Manual (QA Volume I), Nuclear Power Department Quality Assurance Policy Manual and Nuclear Power Department Quality Assurance Procedures Manual.
3. Maintain and help coordinate the required storage of quality assurance records pertaining to their respective groups.

Quality Assurance Section

1. Review QA scope purchase documents to assure adequate quality requirements (Section 1.8.4) are established.
2. Verify conformance of received items to purchase document requirements through various activities including source verification, as appropriate, and review documentary evidence of quality for procured items prior to release of the items (Section 1.8.7).

3. Perform quality assurance evaluations of vendors and contractors commensurate with the importance, complexity, and quantity of the product or services and assure vendor compliance with established requirements through audit and surveillance activities (Section 1.8.7).
4. Perform audits of the quality assurance program as implemented on-site by Plant personnel and contractors (Section 1.8.18). Also audit off-site company organizations performing quality-related activities for Point Beach.

1.8.2 QUALITY ASSURANCE PROGRAM

A quality assurance program is established and implemented in accordance with written policies, procedures, and instructions which comply with the requirements of 10 CFR 50 Appendix B and 10 CFR 71, Subpart H. The program is also applied to activities such as fire protection to a degree commensurate with Wisconsin Electric commitments. Specific QA Program applicability to fire protection and radioactive material packaging is addressed in Tables 1.8-2 and 1.8-3, respectively. The Nuclear Power Department Quality Assurance Program is set forth in the NPD QA Policy Manual, the NPD QA Procedures Manual, and PBNP QA Volume I. Control of the above manuals is as follows:

1. Distribution and maintenance of the "Nuclear Power Department Quality Assurance Policy Manual" and revisions thereto are controlled by the General Superintendent of Quality Assurance. The policies in this manual are approved by the Vice President-Nuclear Power Department.

2. Distribution and maintenance of the "Nuclear Power Department Quality Assurance Procedures Manual" and revisions thereto are controlled by the General Superintendent of Quality Assurance. The manual procedures are reviewed and approved by each of the section heads within the Nuclear Power Department.

3. Distribution and maintenance of the "PBNP Administrative Control Policies & Procedures Manual" (QA Volume I) and revi-sions thereto is controlled by Point Beach Nuclear Plant. The manual is reviewed and approved on-site by the plant organization.

Final responsibility for modifications, repairs, maintenance, and operations, including the quality assurance program, lies with the President. Management review of the status and adequacy of the quality assurance program is accomplished by at least semiannual review by the WE QA Committee (Section 1.8.1) and by regular briefings (at least once every two months) with the President.

The quality assurance program applies to structures, systems and components (including expendable and consumable items which are used therein) which are considered important to safety from the standpoint of safety-related functions to be performed. The structures, systems and components considered important to safety are identified in the Nuclear Power Department Quality Assurance Policy Manual. This list is consistant with requirements of the regulations as described in this FSAR, and also includes non safety-related systems and components requiring quality assurance coverage such as fire protection and radioactive material packaging. Positive controls are implemented to assure updating of the list as necessary.

The classification of a system or component as important to safety does not imply that the complete system, or all the components or component parts within that system, are important to safety. Those specific items within a system considered important to safety are also identified in the Nuclear Power Department Quality Assurance Policy Manual.

The program provides for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained The indoctrination and training program is structured to assure that:

1. Personnel performing quality activities are instructed as to the purpose, scope and implementation of the quality-related manuals, procedures and instructions; and it is emphasized that these are mandatory requirements which must be implemented and enforced.

2. Personnel performing quality-related activities are trained and qualified in the principles and techniques of the activity being performed.

3. Appropriate training procedures are established and that records of training are maintained.

Section 5.2.10 of ANSI N18.7-1976 states that the provisions of ANSI N45.2.3-1973 shall be applied to those activities which are comparable in nature and extent to related activities occurring during construction.

Point Beach Nuclear Plant practices good housekeeping and cleanliness involving activities performed by plant and contractor personnel to maintain the necessary standard of cleanliness.

Scheduled and documented daily-to-weekly surveys of potentially contaminated or radioactive areas are conducted by health physics personnel, followed by decontamination or radioactive cleanup as necessary. Surveys ensure cleanliness checks of even the least traveled areas. An additional program provides that Operations shifts are assigned specific plant areas to patrol and clean up as a housekeeping duty. Plant policy is that each person is responsible for cleanliness and good housekeeping in their own immediate work area. Final inspections of work areas following completion of work, including final internal inspections of pressure vessels, tanks, etc., are routinely completed by supervisory personnel. Such inspections are formally documented only in special cases when considered necessary; these normally being final inspections by plant supervisory personnel following work by outside contractors.

Storage of items are controlled to defined quality assurance and fire protection requirements. Access to safety-related equipment or radiation controlled areas is controlled by security regulations or defined health physics rules.

PBNP complies with OSHA regulations in the physical safety and environmental condition of work places.

Significant attention to housekeeping is provided by plant management including frequent housekeeping inspections of portions of the plant by the Manager-Point Beach Nuclear Plant. This constitutes a complete and in-depth inspection of essentially the total plant on a weekly basis.

1.8.3 DESIGN CONTROL

Procedures and practices are established and documented to assure that applicable regulatory requirements and design bases are correctly translated into design documents, such as specification and drawings, for work involving changes or additions to the original design of safety-related structures, systems, and components. These measures include provisions to assure that appropriate quality standards are specified and included in the design documents and that deviations from such standards are controlled. The measures also include provisions to control selection and review for the suitability of application of materials, parts, equipment, and processes that are essential to the safety-related function.

Procedures and practices are established and documented for the identification and control of design interfaces and for coordination among design organizations. These include procedures among participating design organizations for the review, approval, release, distribution, and revision of design documents. The design control measures provide for verifying or checking the adequacy of design by design reviews, by alternate or simplified calculational methods, or by suitable testing programs performed by individuals or groups other than the originator.

Where a test program is used to verify the adequacy of a specific design feature, provisions include suitable qualification testing of a prototype unit under the most adverse design conditions. Design control measures consider, as appropriate, reactor physics; stress, thermal, hydraulic, and accident analyses; compatibility of materials; accessibility for inservice inspection, maintenance and repair; and delineation of acceptance criteria for inspections and tests.

Changes to designs are subjected to commensurate design control measures. When a contemplated change is considered by appropriate management to be

of sufficient scope as to be beyond the expertise of in-house personnel, these changes are reviewed by the organization that performed the original design, or other design organizations determined to be equally qualified. Design activities associated with modifications of safety-related structures, systems and components are accomplished in accordance with the provisions of Section 8 of ANSI N45.2.11-1974.

1.8.4 PROCUREMENT DOCUMENT CONTROL

Procedures and practices are established and documented to provide assurance that applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are included or referenced in the documents for procurement of materials, products, or services. These measures are applied to spare and replacement parts and equipment, new material, and equipment and contracting of services. Procedures require that procurement documents be prepared, reviewed, and approved in accordance with QA program requirements. The Quality Assurance Section reviews procurement documents to ensure the inclusion of adequate quality criteria. Records of the review are maintained.

Procurement documents require suppliers, contractors, or subcontractors to implement quality assurance programs to the extent necessary. The programs are reviewed by the QA Section, qualified third party organizations such as the American Society of Mechanical Engineers (ASME), industry organizations such as the Coordinating Agency for Supplier Evaluation (CASE) or joint utility groups. The evaluation and qualification of supplier programs is documented.

Further details of the system for control of procurement documents is contained in Section 1.8.7.

1.8.5 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

Activities affecting quality are prescribed by documented instructions, procedures or drawings appropriate to the work at hand with the work accomplished in accordance with these documents. Measures are established for the preparation, revision, and control of procedures, instructions, or drawings.

Instructions, procedures, and drawings are required to include appropriate quantitative or qualitative acceptance criteria to ensure work has been satisfactorily accomplished. Supervisors may direct that data be taken without the data taker being cognizant of the acceptance criteria when it is considered that forehand knowledge of the acceptance criteria may prejudice results. The Supervisor is then reponsible to verify conformance. To the extent applicable, as-built drawings and original equipment and system specifications, subject to improvements based upon operational experience and subject to the necessary design control, establish acceptance criteria. When required, these instructions, procedures, and drawings provide methods for complying with appropriate regulations.

Section 5.2.2 of ANSI N18.7-1976 requires that temporary major procedure changes which do not change the intent of an approved procedure be approved by two members of the plant staff knowledgeable in the areas affected bythe procedure. One of these individuals is to be the Duty Shift Superintendent who holds a senior operators license. As described in Section 15.6 of the Technical Specifications, Point Beach follows the above guidance for operating procedures. For Maintenance, Instrumentation and Control, Reactor Engineering, Chemistry and Health Physics procedures, approval is not required from the Duty Shift Superintendent for temporary changes. For a further description of the system for temporary changes, refer to Section 15.6.8 of the Technical Specifications.

Section 5.3.2 of ANSI N18.7-1976, which discusses the content of procedures, states in part, "...procedures shall include, as appropriate...(8) Acceptance Criteria." PBNP has determined through considerable experience that the incorporation of acceptance criteria is not always advantageous, as discussed herein.

1.8.6 DOCUMENT CONTROL

Procedures and practices are established and documented to control the issuance and revision of documents, such as: maintenance and modification procedures; design specifications; design, manufacturing, construction, and installation drawings; procurement documents; manufacturing, inspection,

and testing instructions; test and operating procedures; and QA manuals, safety analysis reports, and related design criteria documents. The procedures identify the group responsible for review, approval, issuance of the documents, and changes to them. For quality related documents, the review includes an assessment of applicable quality requirements.

The procedures provide assurance that documents, including changes, are reviewed for adequacy and approved for use by authorized personnel and are distributed to and used at the location where the prescribed activity is performed prior to commencement of the activity. These include prompt issuance of changes and control of the obsolete or superseded documents to prevent inadvertent use. Controls, such as maintenance and distribution of indices, are also implemented to identify the current revision of a document to be used. These provisions are also used as a basis for auditing the document control system. Document control procedures include provisions for determining the appropriate group for reviewing changes to documents.

Documents classified as QA records are subjected to the additional requirements described in Section 1.8.17.

1.8.7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

Procedures and practices are established and documented to assure that purchased material, equipment and services conform to the procurement documents. These measures include review of all plant initiated purchase requisitions by the QA Coordinator or his designee and subsequently, QA scope requisitions are reviewed by the QA Section to verify incorporation of appropriate quality requirements. Additionally, all requisitions initiated by Nuclear Engineering are reviewed by the QA Section.

The bases for selection of suppliers include previous experience, meeting the required qualifications of the contractor who erected the plant, or a pre-award evaluation of the proposed supplier's capabilities and qualifications. Industry programs, such as those applied by the ASME,

the CASE, or other established utility groups, are used as input or the basis for supplier qualification whenever appropriate.

Control of purchased items includes provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, inspection at the source, and examination of products at receipt. These controls also include provisions for monitoring contractors providing services through performance of audits and surveillances, as necessary, to verify conformance with procurement requirements. These are performed by appropriately trained personnel in accordance with written procedures and instructions.

Documentary evidence is required to be available prior to use of equipment. Procedures require assignment of a Quality Assurance Release (QAR) identification number prior to placing the purchased items into service. These procedures require all documentation required by the purchase order to be available and satisfactory prior to issuance of the QAR. Measures are provided for monitoring the effectiveness of contractor control of quality consistent with the importance, complexity, and quantity of the product or services.

The requirements of ANSI N45.2.13-1976 are met for the procurement of components within the scope of Section 5.2.13 of ANSI N18.7-1976.

1.8.8 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

Procedures and practices are established and documented requiring identification of materials, parts, and components, including partially fabricated assemblies, to prevent use of incorrect or defective items. Identification requirements are based on as-built drawings and specifications. Identification requirements for other than identical replacement items are determined during planning for the modification or addition. Identification methods and locations are selected so as not to affect the function or quality of the item.

These measures assure that identification is maintained by stock number, system identification, part number, or other appropriate means, either on the item or on records traceable to the item, as required during installation and use. These measures apply to plant personnel and on-site contractors.

Procurement documents invoke appropriate requirements for identification and control of material during manufacture, including provisions for in-process audits of the manufacturer's program which allow the licensee the option of auditing the vendor.

1.8.9 CONTROL OF SPECIAL PROCESSES

Procedures and practices are established and documented to assure that special processes, such as welding, heat treating, and nondestructive examinations are controlled and accomplished by qualified personnel using qualified procedures or process sheets in accordance with applicable codes and standards. Verification of conformance is documented. These measures require copies of qualifications to be on site during process performance whether by WE personnel or contractors. Procurement documents specify appropriate control requirements for processes performed off-site.

1.8.10 INSPECTION

Procedures and practices are established and documented providing for appropriate inspection of activities affecting quality and to verify conformance with the documented instructions, procedures, drawings, or specifications for accomplishing the activity. Inspection procedures, instructions, and checklists include the following, as applicable:

1. Identification of characteristics to be inspected.
2. Identification of the individuals or groups responsible for performing the inspection operation.
3. Acceptance and rejection criteria.
4. The method of the inspection.
5. Verification of completion and documentation of the inspection.

Maintenance, replacement, or rework items are inspected in accordance with original inspection requirements or improved requirements based on operating experience. Modified items are inspected by methods at least equivalent to the original inspection methods.

These measures provide for verification of conformance to be performed by appropriately qualified individuals other than those who performed the activity. Quality control inspections may be performed by a workman's first line supervisor; however, quality assurance acceptance is not performed by the first line supervisor or anyone reporting to him. Qualification of these individuals in accordance with appropriate requirements is documented. Provisions for Code Authorized Inspection are included when required.

Examinations, measurements, or tests are performed for work operations where necessary. Procurement documents for materials or products specify examinations, measurements, or tests to be performed for each work operations where necessary to assure quality. Storeroom personnel perform receiving inspection on procured materials as appropriate per the procurement documents, specifications, procedures, and instructions. Storeroom personnel are knowledgeable of the requirements of the quality assurance program. Questions regarding quality assurance are referred to the QA Coordinator or QA Section. Procurement documents for materials or products, for which direct inspection is impossible or disadvantageous, specify provisions for indirect control by monitoring processing methods, equipment, and personnel. When control is inadequate without both inspection and process monitoring, provisions for both are included. Mandatory hold points are specified and used where required.

Section 3.4.2. of ANSI N18.7-1976 states that personnel performing inspection, examination, and testing activities shall be qualified to ANSI N18.1-1971, or shall meet the requirements of ANSI N45.2.6-1973. With few exceptions, Point Beach personnel meet or exceed the qualification requirements of ANSI N18.1-1971, and are therefore qualified to perform plant inspection, examination, and testing activities. Those few

exceptions are in job functions not discussed in ANSI N18.1-1971 and certain inspection and test personnel who work for contractors as discussed below.

All positions at Point Beach have been evaluated to determine the minimum qualification requirements. The areas considered during the evaluation included regulation, code and standard requirements, education and training, work experience, and physical condition. Applicants for positions at Point Beach who do not meet the minimum requirements, or who do not pass a battery of preemployment aptitude tests are not considered for the position. Additionally, prior to employment, all plant personnel are interviewed by senior plant management and in most cases are interviewed by the Manager-Point Beach Nuclear Plant who makes the final determination of acceptability. There is only one level of qualification at Point Beach, not three levels as indicated in ANSI N45.2.6-1973.

When the extent of the maintenance or modification is such that it must be performed by contract, the potential contractor's QA program is evaluated by the QA Section to determine its acceptability. Included in the evaluation is consideration of the qualifications of inspection and test personnel. In cases where it is determined that a contractor's organization is suitably qualified in all other respects, including qualified personnel, a qualification and certification program which meets all the requirements of ANSI N45.2.6-1973 is not insisted upon. Implementation of the audit program assures qualification of such personnel.

All nondestructive examination personnel are required to be qualified in accordance with the appropriate sections and editions of ASNT Recommended Practice No. SNT-TC-1A.

Section 3.2 of ANSI N18.7-1976 requires that verification of conformance be performed by individuals other than those who performed or directly supervised the work. Verification of conformance is conducted in this manner at Point Beach.

Section 5.2.17 of ANSI N18.7-1976 requires inspections for modifications

and non-routine maintenance to be performed in a manner similar to that associated with construction phase activities. Modifications and non-routine maintenance for which outside contractors are utilized are performed in this manner. Modifications and non-routine maintenance items within the capablities of the onsite operating organization are performed as a routine maintenance activity.

1.8.11 TEST CONTROL

Procedures and practices are established and documented to provide a program of periodic testing and continuing surveillance to demonstrate that structures, systems, and components continue to perform satisfactorily in service. The measures require tests to be performed in accordance with written test procedures which incorporate the requirements and acceptance limits (except as noted in Section 1.8.5) from applicable design documents by appropriately trained and qualified personnel. Test procedures include provisions for assuring that all prerequisites for the test have been met, that adequate test instrumentation is available and used, and the test is performed under suitable environmental conditions. Test results are documented and evaluated to assure test requirements have been satisfied. These measures require replacement or modified structures, systems and components to be subjected to sufficient proof, preoperational, and operational testing to demonstrate that they will perform satisfactorily in service.

1.8.12 CONTROL OF MEASURING AND TEST EQUIPMENT

Controlled procedures and practices are established and documented to assure that tools, gauges, instruments, and other measuring and testing devices used in activities affecting quality are properly identified, controlled, calibrated, and adjusted at specific intervals to maintain accuracy within necessary limits. Calibration procedures specify standards to be used for performing the calibration. Procedures require that standards used have greater accuracy than the item being calibrated. These measures provide for identification of the equipment and associated records and appropriate corrective action when out-of-calibration conditions are noted.

1.8.13 HANDLING, STORAGE, AND SHIPPING

Procedures and practices are established and documented to control the handling, storage, shipping, cleaning, and preservation of material and equipment in accordance with work and inspection instructions by qualified individuals to prevent damage or deterioration and preclude loss of identification. The measures include specification and use, when necessary, of special protective environments, such as inert gas atmosphere, specific moisture content, and temperature levels.

1.8.14 INSPECTION, TEST, AND OPERATING STATUS

Procedures and practices are established and documented to indicate by suitable means, the status of inspections and tests to be performed upon individual items. These measures include provisions for the identification of items which have satisfactorily passed required inspections and tests when necessary to preclude inadvertent bypassing of such inspections and tests. Procedural controls to perform operations out of sequence are established. These measures also include provisions for indicating nonconforming, inoperative, or malfunctioning components within a system to prevent inadvertent operation.

1.8.15 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

Procedures and practices are established and documented to control materials, parts and components, or quality activities which do not conform to established requirements. To prevent the inadvertent use or installation of purchased material, parts, or components, these measures may include timely return of nonconforming materials, parts, or components to the vendor for replacement with satisfactory items. Formal nonconformance control systems are in place to assure control and disposition of nonconforming items or activities including adherence to 10CFR21 as necessary.

Maintenance/Work Requests identify and control nonconforming items requiring repair or rework to be returned to satisfactory condition. Where a safety-related component is required to be temporarily or permanently changed, such that it no longer complies with the original and approved design, such changes, with required approvals, are made via the approved modification request procedure.

The Nuclear Power Department has established provisions for documenting and dispositioning nonconforming items or conditions, which are identified during inspection, surveillance or auditing activities.

1.8.16 CORRECTIVE ACTION

Procedures and practices are established and documented to assure that conditions adverse to quality; such as failures, malfunctions, deficiencies, deviations, defective material, and equipment and nonconformances; 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.

1.8.17 QUALITY ASSURANCE RECORDS

Procedures and practices are established and documented to assure that sufficient records are generated and maintained to furnish evidence of activities affecting quality. Where practicable, the guidelines of ANSI N45.2.9-1974 apply. The records consist of at least operating logs and the results of reviews, inspections, tests, monitoring, work performance, and materials analyses. Also included are closely related data such as qualifications of personnel, procedures and equipment. Inspection and test records include, as a minimum, identity of the inspector or data recorder, the type of observation, the results and the acceptability, or action taken in connection with any deficiencies noted. Records are required to be identifiable and retrievable.

Requirements concerning records retention; such as duration, location, and assigned responsibility; are established to be consistent with applicable regulatory requirements. Radiographs are retained as nonpermanent records for a minimum of ten years after the date of the radiograph.

Associated radiographic review records are permanently retained and provide necessary weld quality/acceptance information. A record storage facility is used with controlled access to prevent destruction of records by fire, flooding, theft, and deterioration by environmental conditions, such as temperature or humidity.

In 1971, Point Beach recognized the need to improve its records management program in the area of preservation of records. In the absence of any guidance in the form of regulatory guides or national standards, it was decided to generally follow the requirements of NFPA 232-1970.

The requirements of NFPA 232-1970 were reviewed in light of importance of the records being stored and the risk of destruction of the records. It was determined that the records being stored required positive protection as many were irreplaceable. Possible locations for records storage facility were studied, and it was determined that the lower level of the Energy Information Center located on the plant grounds, offered an ideal location for a records storage facility.

This location was chosen as it was an area of minimum weight of combustibles and the building itself was fire resistant. It was determined, based on the above factors, that a separate room would be constructed in the lower level of the Energy Information Center to provide further protection.

The room was built to meet Wisconsin Administrative Code requirements for four-hour construction, and was treated to minimize the risk of water infiltration. In addition, the room was equipped with an inert gas fire suppression system which is automatically triggered by smoke or heat. Triggering of the fire suppression system also activates an alarm signal and a visible alarm which can be observed from a continuously manned guard station.

Based on the analysis of the fire hazard present in the Energy Information Center, the alarm system, and the sophisticated fire suppression system, it was decided that the requirement for a four-hour vault door was unnecessary. The entrance to the room is closed with a Class A 250°F

labeled fire door. In addition, the fire suppression system required an electrical supply, which led to the waiving of the requirement that walls could not be penetrated by electrical conduit. The electrical supply for room is brought into the room via a conduit through one of the walls which has been installed to minimize the risk of fire passing through the wall via this penetration.

1.8.18 AUDITS

Procedures and practices have been established and documented to provide a comprehensive system of planned and periodic audits to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program.

Audits are performed in accordance with written procedures or checklists by appropriately trained personnel not having direct responsibilities in the areas being audited. The in-plant QA program is audited periodically, normally quarterly, by the QA Coordinator or his designee and quarterly by the QA Section. The QA Section also performs audits under the cognizance of the Off-Site Review Committee as required by Technical Specification 15.6. On-site and off-site contractor audits are timed as appropriate for the work scheduled.

Audit results are documented and reviewed by management personnel having responsibility in the area audited. Audit reports are routed to management responsible for correcting any unsatisfactory items noted. Follow-up action, including reaudit of deficient areas, is taken when indicated. When follow-up audits reveal repetitive occurrences which reflect possible trends adverse to the effectiveness of the QA program, these results shall be reported to the appropriate management level to effect corrective action.

In a footnote to Section 4.5 of ANSI N18.7-1976, it is stated that the provisions of proposed ANSI N45.2.12, Draft 4, Revision 2, dated January 1, 1976, shall be used for audits performed to meet the requirements of Section 4.5. Section 3.2 of ANSI N18.7-1976 recognizes that quality assurance is an interdisciplinary function and that advantages may accrue from having reviews of certain plant functions performed by technically

qualified personnel, in lieu of quality assurance personnel, because of special technical competence which may be required to perform the review. WE strongly endorses this position and has assigned certain review and audit functions within the plant to technically qualified personnel in lieu of quality assurance personnel.

Sufficient audits are performed in accordance with the provisions of ANSI N45.2.12 to meet the requirements therein; however, the technical audits are not performed under ANSI N45.2.12 requirements.

TABLE 1.8-1

COMMITMENT TO REGULATORY GUIDES AND ANSI STANDARDS

1. Regulatory Guide 1.8 (Safety Guide 8) dated March 10, 1971

   Full commitment except that Point Beach commits to ANSI N18.1-1971 in lieu of the proposed ANSI N18.1 dated June 22, 1970.

2. Regulatory Guide 1.28 (Safety Guide 28) dated June 7, 1972

   ANSI N18.7-1976 states in part, "This standard fully and completely describes the general requirements and guidelines of ANSI N45.2-1971 as those requirements, and guidelines apply during the operational phase of plant life." As such, commitment to ANSI N18.7-1976 for Point Beach obviates the need to commit to Regulatory Guide 1.28 which endorses ANSI N45.2-1971.

   Point Beach does, however, commit to the position of Regulatory Guide 1.28 to the extent of requiring its vendors to have quality assurance programs which meet the appropriate requirements of ANSI N45.2-1971 as mentioned in Section 5.2.13.1 of ANSI N18.7-1976.

3. Regulatory Guide 1.30 (Safety Guide 30) dated August 11, 1972

   Commitment to follow the position of Regulatory Guide 1.30, which endorses and supplements ANSI N45.2.4-1972, for activities occuring during the operational phase that are comparable in nature and extent to related activities during construction.

4. Regulatory Guide 1.37 dated March 16, 1973

   Commitment to follow the position of Regulatory Guide 1.37, which endorses and supplements ANSI N45.2.1-1973, for activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during construction.

TABLE 1.8-1 (Continued)

5. Regulatory Guide 1.38, Revision 1, dated October 1976

Commitment to follow the position of Regulatory Guide 1.38, which endorses and supplements ANSI N45.2.2-1972, for activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during construction.

6. Regulatory Guide 1.39, Revision 1, dated October 1976

Commitment to follow the position of Regulatory Guide 1.39, which endorses and supplements ANSI N45.2.3-1973, for activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during construction except that Point Beach does not commit to the documentation requirements of ANSI N45.2.3-1973 and provides an alternative to the housekeeping zone requirements therein. Descriptions of these differences are provided in Section 1.8.2.

7. Regulatory Guide 1.54 dated June 1973

Commitment to follow the position of Regulatory Guide 1.54, which endorses and supplements ANSI N101.4-1972, for activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during construction.

8. Regulatory Guide 1.58 dated August 1973

Commitment to follow the position of Regulatory Guide 1.58, which endorses and supplements ANSI N45.2.6-1973, for activities occurring in the operational phase that are comparable in nature and extent to related activities during construction, except that Point Beach does not commit to the levels of qualification nor separate certification requirements of ANSI N45.2.6-1973. Descriptions of these differences are provided in Section 1.8.10.

TABLE 1.8-1 (Continued)

9. Regulatory Guide 1.64 dated October 1973

Commitment to follow the position of Regulatory Guide 1.64, except that Point Beach commits to ANSI N45.2.11-1974 in lieu of Draft 3 Rev. 1 dated July 1973, for design activities associated with modification of safety-related structures, systems and components.

10. Regulatory Guide 1.74 dated February 1974

Full commitment.

11. Regulatory Guide 1.88, Revision 1, dated December 1975

Commitment to follow the position of Regulatory Guide 1.88, which endorses and supplements ANSI N45.2.9-1974 and NFPA 232-1970. Point Beach has determined that the existing records storage facility provides a level of protection to the vital records at the plant which is equivalent to the requirements of Regulatory Guide 1.88. Description of the differences are provided in Section 1.8.17. The Point Beach policy for the retention of radiographs and assorted review records is outlined in Section 1.8.17.2.

12. Regulatory Guide 1.94 dated April 1976

Commitment to follow the position of Regulatory Guide 1.94, which endorses and supplements ANSI N45.2.5-1974, for activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during construction.

13. Regulatory Guide 1.146 dated August 1980.

Commitment to follow the position of Regulatory Guide 1.146, which endorses ANSI N45.2.23, for audits of in-plant activities which are performed on Point Beach Nuclear Plant organizations.

14. ANSI 18.7-1976

Refer to Section 1.8.0 for details of the Point Beach commitment.

TABLE 1.8-2

SUBSECTIONS OF SECTION 1.8
APPLICABLE TO THE FIRE
PROTECTION PROGRAM

Subject	Subsection
Administrative and Organizational	1.8.1, 1.8.2
Design and Procurement Document Controls	1.8.3, 1.8.4
Instructions, Procedures and Drawings	1.8.5
Control of Purchased Materials, Equipment and Services	1.8.7, 1.8.10
Inspection	1.8.10
Test and Test Control	1.8.11
Inspection, Test and Operating Status	1.8.14
Nonconforming Items	1.8.15
Corrective Action	1.8.16
Records	1.8.17
Audits	1.8.1, 1.8.18

TABLE 1.8-3

SUBSECTIONS OF SECTION 1.8 APPLICABLE TO SHIPPING PACKAGES FOR RADIOACTIVE MATERIALS (10 CFR 71, SUBPART H)

Subject	Subsection
Organization	1.8.1
Quality Assurance Program	1.8.2
Design Control	*not applicable
Procurement Document Control	1.8.4
Instructions, Procedures and Drawings	1.8.5
Document Control	1.8.6
Control of Purchased Material, Equipment and Services	1.8.7
Identification and Control of Materials, Parts and Components	1.8.8
Control of Special Processes	1.8.9
Inspection	1.8.10
Test Control	*not applicable
Control of Measuring and Test Equipment	1.8.12
Handling, Storage and Shipping	1.8.13
Inspection, Test and Operating Status	1.8.14
Nonconforming Materials, Parts or Components	1.8.15
Corrective Action	1.8.16
Quality Assurance Records	1.8.17
Audits	1.8.18

* Design and testing control are activities which are not normally performed by Point Beach Nuclear Plant personnel. However, these activities are imposed on suppliers providing radioactive material packaging or associated services, as appropriate.

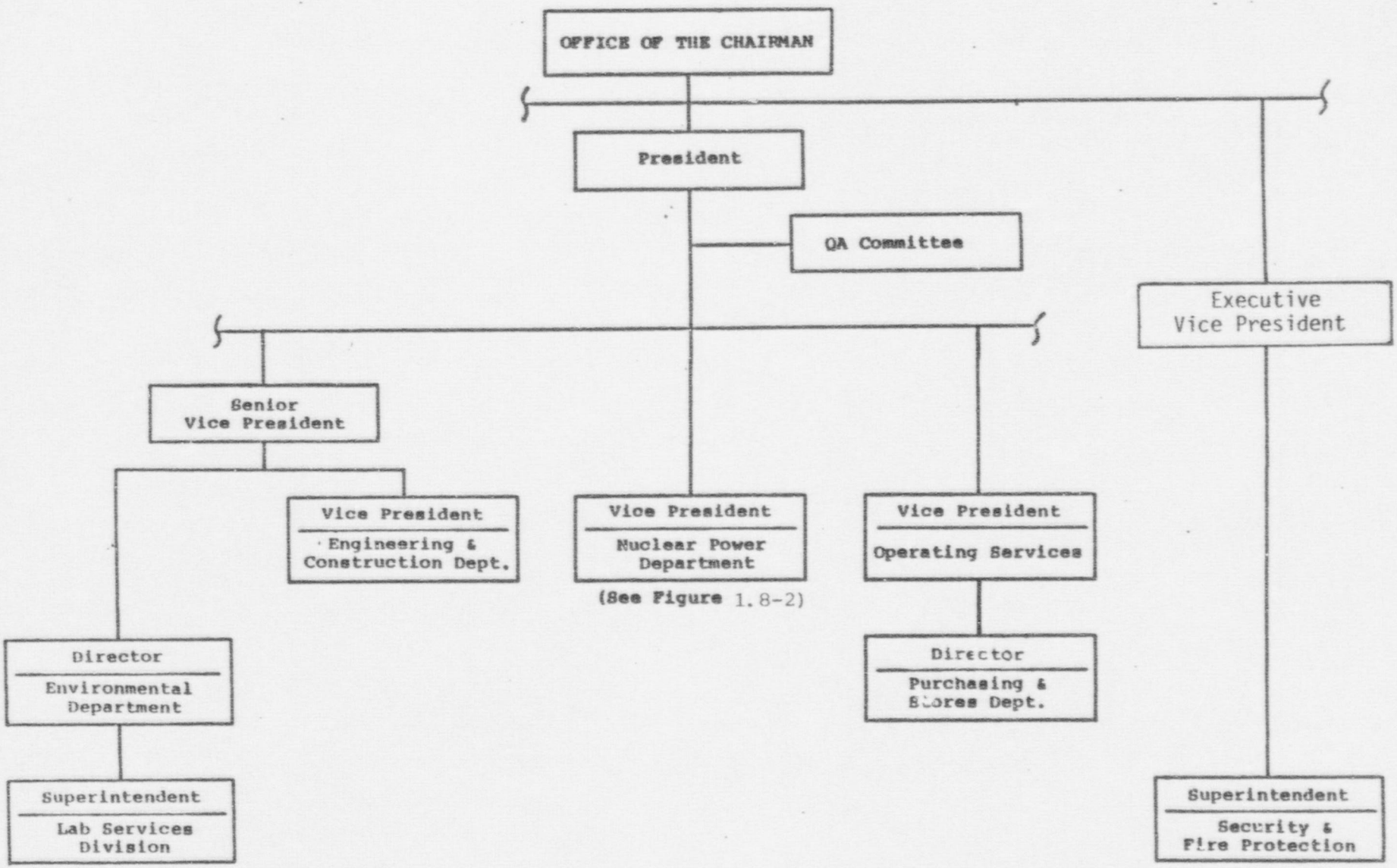

Figure 1.8-1 WISCONSIN ELECTRIC POWER COMPANY ORGANIZATION WITH QUALITY ASSURANCE INTERFACE TO POINT BEACH NUCLEAR PLANT

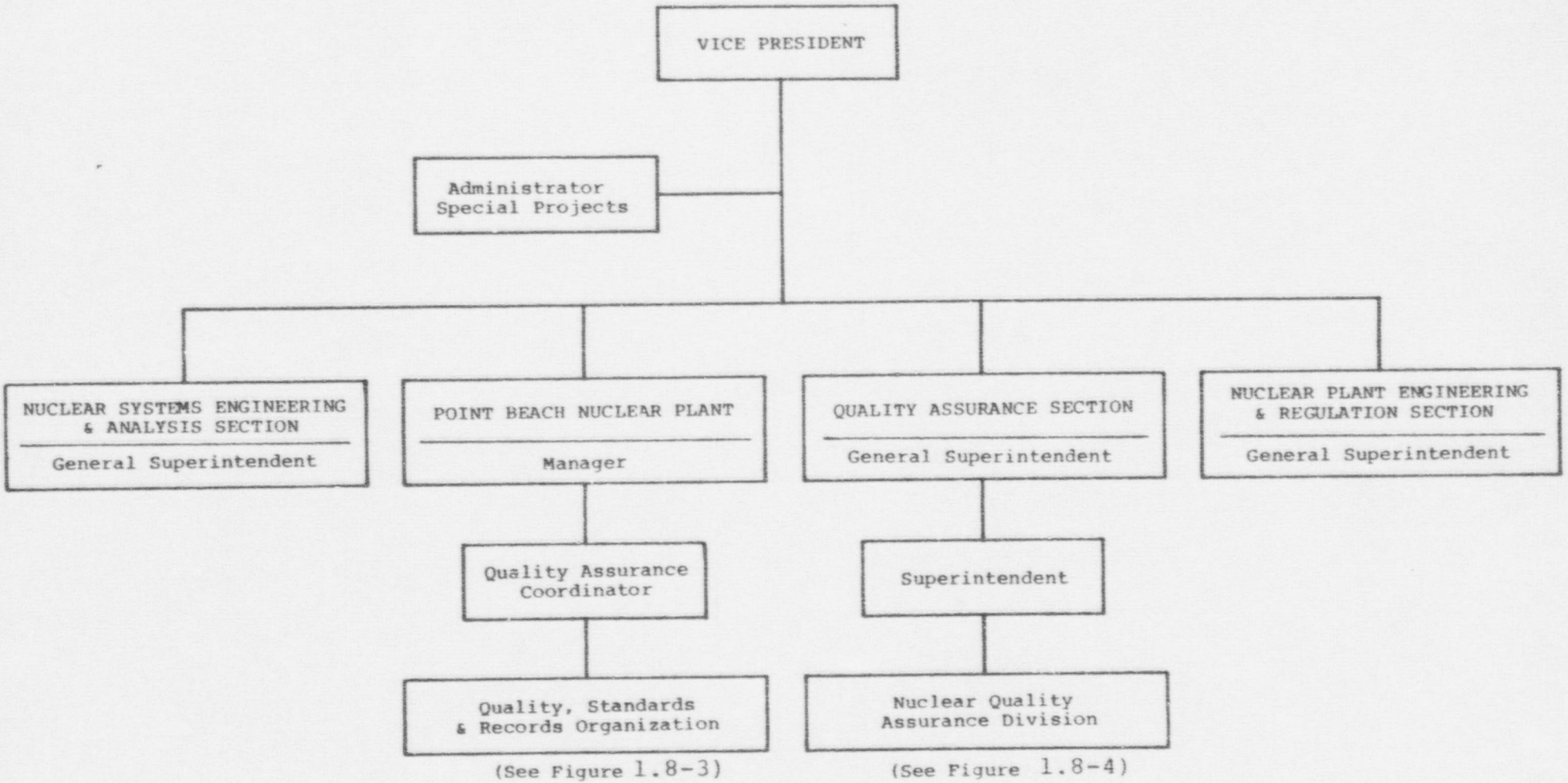

Figure 1.8-2 NUCLEAR POWER DEPARTMENT ORGANIZATION

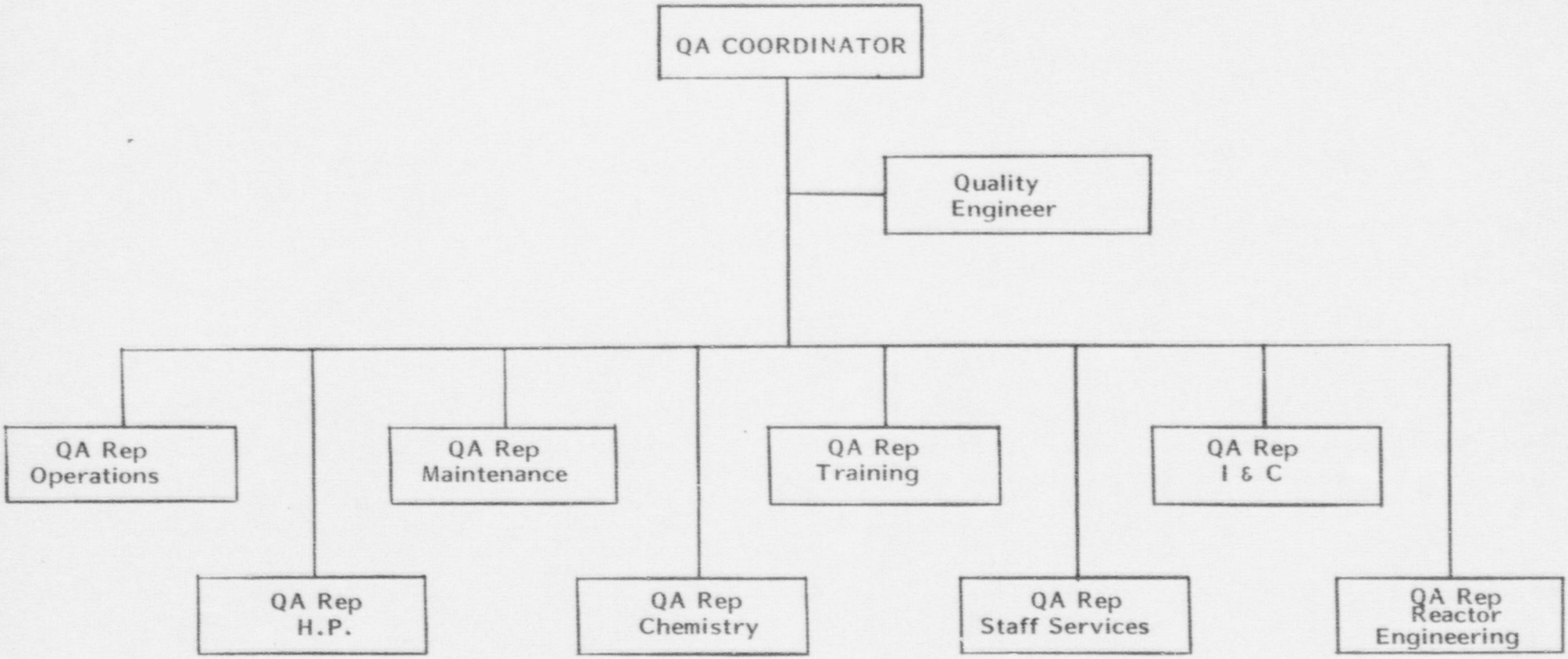

Figure 1.8-3 PBNP QUALITY, STANDARDS & RECORDS ORGANIZATION

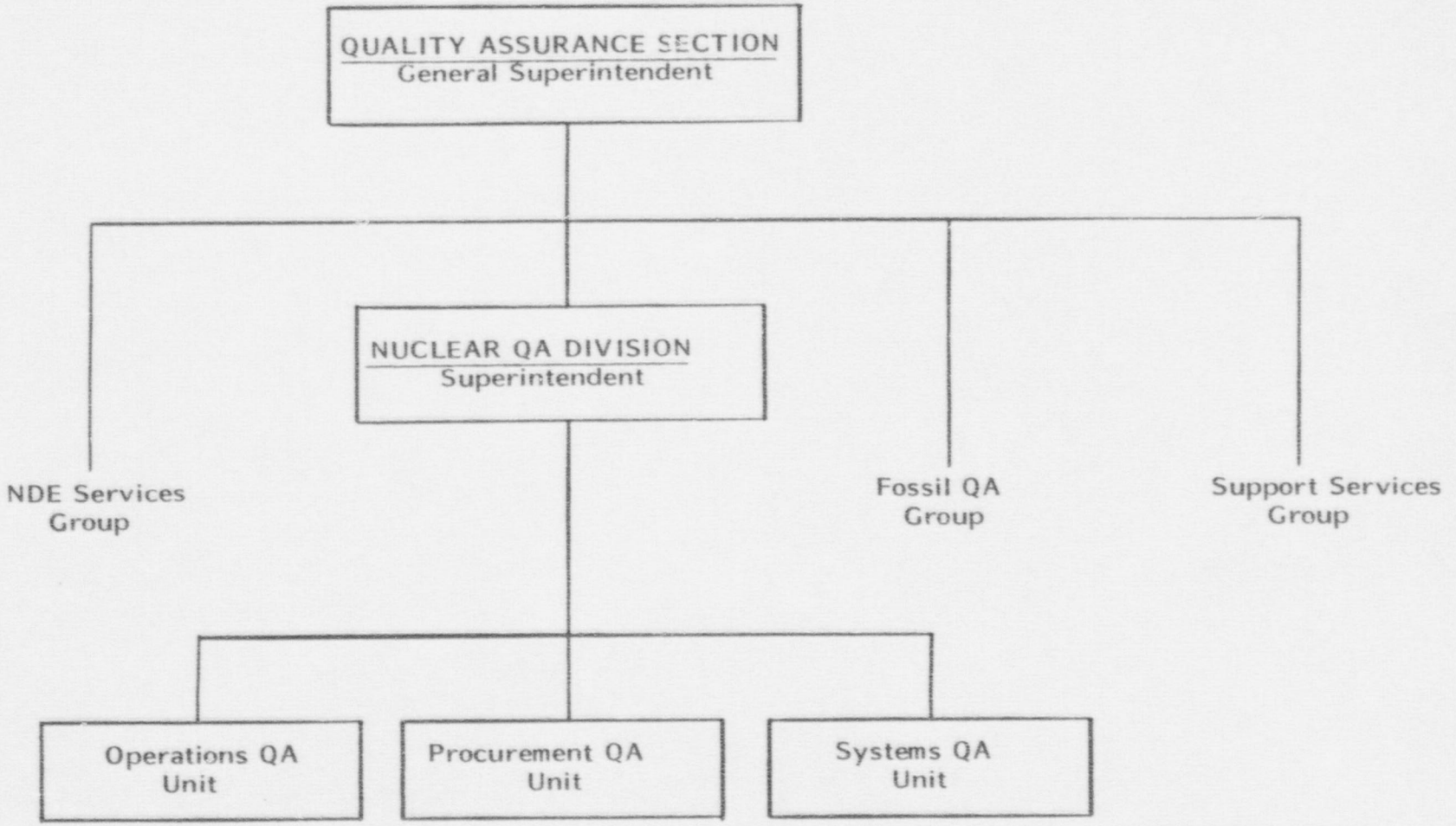

Figure 1.8-4 QUALITY ASSURANCE SECTION ORGANIZATION