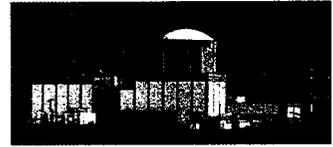




Kewaunee Nuclear Power Plant  
N490, State Highway 42  
Kewaunee, WI 54216-9511  
920-388-2560

Operated by  
Nuclear Management Company, LLC



August 13, 2001

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

10 CFR 50.54(a)(3)

Ladies/Gentlemen:

DOCKET 50-305  
OPERATING LICENSE DPR-43  
KEWAUNEE NUCLEAR POWER PLANT  
REVISION 21-B OF THE OPERATIONAL QUALITY ASSURANCE PROGRAM  
DESCRIPTION

Reference: 1) Letter from M. E. Reddemann (NMC) to NRC Document Control Desk dated December 11, 2000

In accordance with the requirements of 10 CFR 50.54(a)(3), this letter submits the current description (Revision 21-B) of Nuclear Management Company's, LLC (NMC) Operational Quality Assurance Program for the Kewaunee Nuclear Power Plant. Revision 21 of this document was submitted on December 11, 2000 (Reference 1) and reviewed by the Nuclear Regulatory Commission (NRC).

Attachment 1 to this letter describes the changes made to the OQAP Description, the reason for the change, and the bases for concluding that the revisions continue to satisfy the criteria of 10 CFR 50, Appendix B. These revisions primarily incorporate organizational changes and also include other editorial clarifications. Attachment 2 to this letter is Revision 21-B of the OQAP Description.

This submittal identifies the changes made in conjunction with Revision 21-B of the OQAP Description. NMC has determined that these changes strengthen and enhance the implementation of the Quality Assurance Program, and that none of the changes made reduce the commitments previously submitted and accepted by the NRC.

Sincerely,

Mark E. Reddemann  
Site Vice President

TJW  
Attach.

cc - US NRC Senior Resident Inspector  
US NRC, Region III

2004

Attachment 1

to

Letter from Mark E. Reddemann (NMC) to NRC Document Control Desk

dated

August 13, 2001

Description of Revisions to the Kewaunee Nuclear Power Plant

Operational Quality Assurance Program Description

Revision 21-B

Changes are being made to the OQAPD to reflect organizational changes and include editorial clarifications.

Organizational, reporting, and title changes were made in support of our efforts to operate Kewaunee Nuclear and Point Beach Nuclear as a three unit site. Reporting relationships for the Nuclear Management Company (NMC) and Wisconsin Public Service Corporation (WPSC) were found to require clarification. The updates to this document reflect the current corporate and plant organizational charts and announcements of effective changes.

Changes to the OQAPD are editorial or administrative in nature and do not decrease the level of plant oversight or reduce previous commitments made in the OQAPD.

Specifically, the changes that affect the OQAPD are identified by page number and are as follows. The page numbers reflect changes made to the copy without strikeouts.

**Page 2&3**      **Description of Change**

Change “Senior Vice President & Chief Nuclear Officer” to “Executive Vice President & Chief Nuclear Officer.” Change “Senior Vice Presidents Operations” to “Senior Vice President Nuclear Operations, Senior Vice President Nuclear Support Programs, and Senior Vice President Nuclear Assessment Programs.” Delete “Vice Presidents – Operations and Vice President Engineering.”

**Reason for Change**

These changes reflect NMC organizational changes. Functional area responsibilities are retained, with minor changes in lines of reporting. The paragraph now focuses on the senior vice president positions.

**Safety Evaluation**

These changes do not decrease management oversight at the plant and do not reduce previous commitments made in the OQAPD description.

**Page 3**      **Description of Change**

Change “Senior Vice President - Operations” to “Senior Vice President Nuclear Operations.”

**Reason for Change**

This change reflects an NMC Organization change.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 3**

**Description of Change**

Change “Vice President – Operations (2 each)” to “Senior Vice President Nuclear Support Programs.” Reword paragraph to denote a single position, stating, “This position along with vice president support is responsible for Kewaunee Nuclear Power Plant nuclear fuel design, high level waste management, security, procurement, warehousing, and support for emergency planning.

**Reason for Change**

This change reflects an NMC organizational change. The change clarifies the actual responsibilities for the position.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 3**

**Description of Change**

Add the position description, “Senior Vice President Nuclear Assessment Programs” with the following text, “This position is responsible for the overall quality assurance, oversight and assessment activities. Under this Senior Vice President, the Director-Nuclear Oversight has primary responsibility for the QA Program Description, corporate directives, internal audit program, supplier qualification program, quality control program services for applicable sites, off-site review committee coordination, and Employee Concerns Program.

At page 4, delete “Senior Vice President – Assessment & Performance Review,” and “Director – Nuclear Oversight” sections.

**Reason for Change**

This change reflects the current alignment and duties of the Senior Vice President. Associated roles are combined for clarity.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 3**

**Description of Change**

For the Vice President - Business Support, delete the responsibility for “communications.”

**Reason for Change**

The responsibility for “communications” is under the Senior Vice President Government Affairs & Business Development. This position is not directly related to plant operations.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 3&4**

**Description of Change**

Change “Director-Regulatory Services & Strategic Issues” to “Director-Regulatory Affairs & Strategic Issues.” Place this section on page 3, after the Vice President – Engineering Section.

**Reason for Change**

Title change. This arrangement reflects the areas under the Executive Vice President & Chief Nuclear Officer.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 4**

**Description of Change**

Change “Senior Vice President – Energy Supply” to “Senior Vice President - Development” Delete the first sentence under “Senior Vice President – Development (formerly Energy Supply)”

**Reason for Change**

Change of title and responsible individual. WPSC duties listed in the first sentence are not a required part of the OQAPD.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 4&5**

**Description of Change**

Change “This position reports directly to the Chairman and Chief Executive Officer for nuclear responsibilities.” to “This position reports directly to the Chairman, President & Chief Executive Officer of WPS Resources, who is also the WPSC Chairman & Chief Executive Officer, for nuclear responsibilities.” Add “WPSC” prior to “Chairman” under the Manager-Corporate Services section.

**Reason for Change**

This clarification accurately reflects the reporting relationships for the asset management, NMC interface, and corporate services aspects of Kewaunee Plant support.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 6**

**Description of Change**

Change the "Site Vice President" in the heading and in the paragraph to "KPB Site Vice President;" also, in the Plant Manager Section.

**Reason for Change**

Title change associated with the Kewaunee - Point Beach combined organization.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 7**

**Description of Change**

Change "Site Engineering Director" to "KPB Engineering Manager." Also, change "The responsibilities of this position are centered around providing engineering support to the Kewaunee Nuclear Power Plant" to "This position ensures that engineering support is provided to the Kewaunee Nuclear Power Plant."

**Reason for Change**

Title change associated with the Kewaunee - Point Beach combined organization. The phrase "centered around" conflicts with the combined organizational responsibilities.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 7**

**Description of Change**

Under the Physical Change section, add a sentence to read, "Procurement technical evaluations are supported by the Supply Chain area."

**Reason for Change**

Control of procurement technical evaluations (PTE) is not part of the KPB Engineering Manager responsibilities as implied by the preceding paragraph. The supply chain area is taking the responsibility for PTEs and a supportive role should be noted.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 8**

**Description of Change**

Change “Power Plant Facilities Information System (PPFIS) and Material Components System (MCS)” to the generic term “plant equipment database.”

**Reason for Change**

These database names will not be used at the plant.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 9&10**

**Description of Change**

Change “Site Service Manager” to “KPB Services Manager” (also, at the end of the first paragraph). Change “Site Business Manager” to “KPB Business Group Manager.” Also, Change “Site Vice President” to “KPB Site Vice President” in the same section. Add a sentence to read, “The areas of budgeting, supply chain, and information technology, receive direction from NMC corporate staff and support from WPCS corporate staff.”

**Reason for Change**

Title changes reflect the joint Kewaunee / Point Beach operation. The added sentence more accurately describes the conduct of business for the three areas noted.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 10**

**Description of Change**

Change “Site Assessment Manager” to “KPB Assessment Manager.” Remove “Maintenance Rule” and place “Maintenance Rule” under “Engineering Programs” on page 8. For the KPB Assessment Manager, add a sentence stating, “The areas of Licensing and Self Assessment receive direction and support from NMC corporate staff.”

**Reason for Change**

Title change reflects joint Kewaunee / Point Beach operation. Maintenance Rule program responsibilities have been moved to engineering. The added sentence clarifies offsite reporting relationships for two areas.

**Safety Evaluation**

This change does not decrease management oversight at the plant and does not reduce previous commitments made in the OQAPD description.

**Page 11, 12, Description of Change**

**19, 20, 21, 22, & 28** At page 11, change “Site Training Manager” to “KPB Training Manager.”  
At page 11, change “Manager-Nuclear Oversight” to “KPB Nuclear Oversight Manager;” in the heading, and in 2 places in the first paragraph. Also, change “Site Vice President” to “KPB Site Vice President” in first paragraph.  
At page 12, change “Manager-Nuclear Oversight” to “KPB Nuclear Oversight Manager,” in the middle of the page.  
At page 19, change “Site Vice President” to “KPB Site Vice President.”  
At page 20, change “Site Engineering Director” to “KPB Engineering Manager.”  
At page 21, change “Site Training Manager” to “KPB Training Manager”  
At page 22, change “Manager-Nuclear Oversight” to “KPB Nuclear Oversight Manager” in the first paragraph. Also, change “Manager-Nuclear Fuel Commodities” to “Project Manager – Kewaunee/Point Beach.”  
At page 28, change “Manager-Nuclear Oversight” to “KPB Nuclear Oversight Manager.”

**Reason for Change**

Title changes reflect joint Kewaunee / Point Beach operation.

**Safety Evaluation**

These changes do not decrease management oversight at the plant and do not reduce previous commitments made in the OQAPD description.

**Figure 1 Description of Change**

Change “Wpsc Chairman & Chief Executive Officer” to “Wpsr Chairman, President and Chief Executive Officer and Wpsc Chairman & Chief Executive Officer”  
Change “Senior Vice President & Chief Nuclear Officer” to “Executive Vice President & Chief Nuclear Officer”  
Change “Senior Vice President Assessment & Performance Improvement” to “Senior Vice President Nuclear Assessment Programs;” depict this position as reporting to the Executive VP & CNO.  
Change “Senior Vice President Operations” to “Senior Vice President Nuclear Operations.”  
Change “Vice President Operations (2)” to “Senior Vice President Nuclear Support Programs.”  
Change “Site Vice President” to “KPB Site Vice President”  
Change “Manager-Nuclear Oversight” to “KPB Nuclear Oversight Manager”  
Change “Director Regulatory Services & Strategic Issues” to “Directory Regulatory Affairs & Strategic Issues;” place this role under the Executive VP & CNO.  
For the Vice President Business Support, delete the responsibility for “Communications.” It is not necessary to depict this.  
Depict “Information Technology” with a direct line to the on-site portion of the chart.  
Move the “Operations Programs” role under the Senior VP Nuclear Operations.

**Reason for Change**

Title changes reflect joint Kewaunee / Point Beach operation, and NMC and WPSO organizational changes.

**Safety Evaluation**

These changes do not decrease management oversight at the plant and do not reduce previous commitments made in the OQAPD description.

**Figure 2**

**Description of Change**

Change “WPSO Chairman & Chief Executive Officer” to “WPSR Chairman, President and Chief Executive Officer and WPSO Chairman & Chief Executive Officer”

Change the “Senior Vice President - Energy Supply” to “Senior Vice President – Development.”

Depict the “Manager – Corporate Services” as reporting directly to the WPSO Chairman & CEO

**Reason for Change**

Title changes reflect WPSO organizational changes. The WPSO President & Chief Operating Officer, and Manager – Corporate Services report to the WPSO CEO. The Senior Vice President – Development reports to the WPSR CEO. One individual holds the CEO positions.

**Safety Evaluation**

These changes do not decrease management oversight at the plant and do not reduce previous commitments made in the OQAPD description.

**Figure 3**

**Description of Change**

Change “Senior Vice President Operations” to “Senior Vice President Nuclear Operations”

Change the “Manager - Nuclear Oversight” to “KPB Nuclear Oversight Manager.”

Depict Maintenance Engineering as reporting to the Maintenance area.

Change “Site Engineering Director” to “KPB Engineering Manager.”

Change “Site Vice President” to “KPB Site Vice President”

Change “Site Business Manager” to “KPB Business Group Manager.”

Change “Site Assessment Manager” to “KPB Assessment Manager”

Change “Site Training Manager” to “KPB Training Manager”

Change “Site Service Manager” to “KPB Services Manager.”

Change “Manager-Nuclear Oversight” to “KPB Nuclear Oversight Manager”

Change “NMC Director Regulatory Services & Strategic Issues” to “NMC Director Regulatory Affairs & Strategic Issues.”

**Reason for Change**

Title changes reflect joint Kewaunee / Point Beach operation, and NMC and WPSC organizational changes.

**Safety Evaluation**

These changes do not decrease management oversight at the plant and do not reduce previous commitments made in the OQAPD description.

**Nuclear Management Company**

**Kewaunee Nuclear Power Plant**

**Operational Quality Assurance Program Description**

**Revision 21-B**

**Date July 11, 2001**

Reviewed By: Tom Well July 12, 2001  
Director - Site Licensing Nuclear / Date

Approved By: [Signature] 7/23/01  
KPB Site Vice President / Date

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 1 of 46</p> |
|--|---|

## INTRODUCTION

The policy of Nuclear Management Company, LLC is to comply with the requirements of the Operational Quality Assurance Program (OQAP) which is authorized under the direction of the President & CEO – Nuclear Management Company. The OQAP fulfills the requirements of 10CFR50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." Compliance with the OQAP is mandatory for applicable Nuclear Management Company and Wisconsin Public Service Corporation employees. Equivalent measures appropriate to the circumstance shall be enforced upon suppliers of materials, equipment or services.

Wisconsin Public Service Corporation (WPSC) entered into a Nuclear Power Plant Operating Services Agreement (NPPOSA) with the Nuclear Management Company, LLC (NMC). Under the service agreement, the NMC is designated as the Contracting Owner of the Facility Operating License (NRC No. 50-305) for the Kewaunee Nuclear Power Plant and is responsible for the operation and maintenance of the plant in accordance with the terms and conditions of the license. Ownership of the Kewaunee Nuclear Power Plant assets remains with Wisconsin Public Service Corporation and is not affected by the transfer of operating authority.

The Operational Quality Assurance Program is established to define, implement and audit operation, maintenance, and modification activities related to nuclear plant safety. The OQAP complies with the provisions of ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," with exceptions, interpretations, and qualifications noted in Appendix A of this description.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 2 of 46</p> |
|--|---|

## 1.0 ORGANIZATION

### 1. General Requirements

The NMC shall be responsible for the establishment and implementation of the Operational Quality Assurance Program. All members of the organization involved in operation of the Kewaunee Nuclear Power Plant (KNPP) shall be made aware of and recognize the necessity for well formulated and detailed administrative controls to assure safe and efficient operation. Lines of authority, responsibility and communication are established under the direction of the NMC President & Chief Executive Officer and identify all levels of management involved in the OQAP, (See Figures 1, 2 & 3). The quality assurance functions performed by each organizational element are cited in the descriptions below.

### 2. Duties and Responsibilities – Nuclear Management Company (Figure 1)

#### President & Chief Executive Officer (CEO)

This position is responsible for providing top level direction of all activities associated with the safe and reliable operation of NMC's nuclear sites. The President & CEO provides guidance with regards to company quality assurance program. This position has delegated specific authority and responsibilities as described in the following, and as shown in Figure 1.

#### Executive Vice President & Chief Nuclear Officer (CNO)

This position has responsibility for all matters relating to the operation and maintenance of the Kewaunee Nuclear Power Plant. Reporting to the Executive Vice President & Chief Nuclear Officer, are the Senior Vice President Nuclear

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 3 of 46</p> |
|--|---|

Operations, Senior Vice President Nuclear Support Programs, and Senior Vice President Assessment Programs. The Executive Vice President & CNO has delegated specific authority and responsibility to these positions as shown in Figure 1.

Senior Vice President – Nuclear Operations

This position is responsible for managing the site organizations' operations by directing and coordinating activities consistent with established goals, objectives, and policies. Follows directions set by the CNO, President, and Board of Directors. Provides direction and structure for the operating units. Participates in developing policy and strategic plans.

Senior Vice President – Nuclear Support Programs

This position, along with vice president support, is responsible for Kewaunee Nuclear Power Plant nuclear fuel design, high level waste management, security, procurement, warehousing, and support for emergency planning.

Senior Vice President Nuclear Assessment Programs

This position is responsible for the overall quality assurance, oversight and assessment activities. Under this Senior Vice President, the Director Nuclear Oversight has primary responsibility for the QA Program Description, corporate directives, internal audit program, supplier qualification program, quality control program services for applicable sites, off-site review committee coordination, and Employee Concerns Program.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 4 of 46</p> |
|--|---|

Vice President – Engineering

This position is responsible for providing engineering support, and services, including, but not limited to, program engineering, design changes, design analyses, and engineering evaluations of plant performance.

Director – Regulatory Affairs & Strategic Issues

This position is responsible for the overall regulatory services associated with licensing activities. This position is also responsible for license renewal programs.

Vice President – Business Support

This position is responsible for administrative, human resources, and information technology services.

Vice President – Treasurer & CFO

This position is responsible for business development and planning, finance, accounting, and payroll.

3. Duties and Responsibilities – Wisconsin Public Service Corporation Offsite (Figure 2)

Senior Vice President - Development

This position reports directly to the Chairman, President & Chief Executive Officer of WPS Resources, who is also the WPSC Chairman and Chief Executive Officer for nuclear responsibilities. This position is responsible for monitoring and managing of the KNPP asset, performing cost benefit analysis and those licensing responsibilities associated with KNPP that are maintained within WPSC. This

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 5 of 46</p> |
|--|---|

position is responsible for interface activities with the Nuclear Management Company.

Manager - Corporate Services

This position reports to the WPSC Chairman and Chief Executive Officer for nuclear responsibilities. This position is responsible for the implementation of the Operational Quality Assurance Program requirements associated with the activities affecting quality performed by the Purchasing and Stores Group, Project & Facility Services, Information Technology, and Environmental Services involving KNPP and ensuring support is available for special projects involving KNPP.

The Purchasing and Stores Group is responsible for providing support to procurement activities for KNPP. The Project & Facility Services Group is responsible for providing engineering and design support for KNPP, as requested.

They also have responsibility for preparation, review, revision and issue of appropriate directives controlling engineering activities performed primarily by this group. The Information Technology Services is responsible for providing for computer system support for KNPP. Environmental Services is responsible for providing and overseeing the Hazardous Chemical Control and Waste Management Plans.

Manager – Substation and Transmission

This position reports to the Vice President Transmission and Engineering and is responsible for substation and transmission activities and the implementation of the quality assurance requirements associated with these functions. The Substation and Transmission Group is responsible for implementing the OQAP, as applicable, whenever their work involves KNPP.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  <p><b>NMC</b><br/> Committed to Nuclear Excellence</p> </div> <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 6 of 46</p> |
|--|---|

**4. Duties and Responsibilities – Onsite (Figure 3)**

KPB Site Vice President

This position is responsible for all plant activities associated with safe and reliable operation, maintenance, engineering, assessment and technical support. He is also responsible for the activities of the site business group associated with budgeting, purchasing, strategic planning and information management. The KPB Site Vice President position maintains authority and responsibility for specific NRC correspondence such as 10CFR21 reports, license amendments and written correspondence signed under oath or affirmation in accordance with 10CFR50.54(f). This position has delegated specific authority and responsibilities as described below to the groups shown in Figure 3.

Plant Manager

This position is responsible to the KPB Site Vice President for the safe and reliable operation and maintenance of the plant in accordance with the requirements of the OQAP. This position has the responsibility for the review, approval, and verification of implementation of nuclear administrative directives affecting quality for his areas of responsibility. These areas include maintenance, operations, and planning and scheduling, as described below:

Plant Maintenance – (Electrical/Mechanical/Instrument & Control) - is responsible for maintenance of plant equipment and maintenance engineering activities.

Plant Operations – is responsible for plant operations including general supervision of all shift operating personnel.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 7 of 46</p> |
|--|---|

Planning and Scheduling – is responsible for plant outage coordination activities, administration of the work request system, and planning and scheduling for routine maintenance activities.

KPB Engineering Manager

This position is responsible for the leadership and supervision of the Engineering and Technical Support group. This position ensures that engineering support is provided to the Kewaunee Nuclear Power Plant. The aspects of this support include, but are not limited to, the evaluation and implementation of physical changes to the plant, engineering evaluations of plant performance, administration and implementation of engineering programs, providing specialized analytical skills as needed to support the plant, providing engineering support on a plant systems basis. This position has the responsibility for review, approval, and verification of implementation of nuclear administrative directives affecting quality for his area of responsibility. These areas are described below:

Physical Change - The physical change process is the method for implementing changes to the plant such as permanent plant modifications/changes, temporary plant modifications/changes, and procurement technical evaluations. This area is not permanently staffed, but rather, is a process supported by the engineering and technical support staff. Procurement technical evaluations are supported by the Supply Chain area.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 8 of 46</p> |
|--|---|

Engineering Programs - All program areas are responsible for providing the specialist for that program. The program specialist is responsible for the management of the program, program performance and implementation. Project teams will be created when appropriate by supplementing the program specialists with Engineering & Technical Support staff or other nuclear staff. Responsibilities of the specialist and team include interaction with customers and senior nuclear management, as necessary. The program team has complete ownership of the program, i.e., responsibility and accountability for successful implementation of the program. Examples of program areas are listed below:

|                                    |                             |
|------------------------------------|-----------------------------|
| Fire Protection                    | Reactor Engineering Program |
| ISI Program                        | Steam Generator Program     |
| IST/Check Valve Program            | STA Program                 |
| Heat Exchanger Performance Program | Turbine Program             |
| Maintenance Rule Program           |                             |

Engineering and Technical Support (E&TS) Group - The groups are responsible for providing the engineering and technical support for all plant processes, programs and systems. This includes supporting physical change, programs, projects, evaluations, maintenance of the system descriptions, drawings, specifications, procedures, plant equipment database, and QA typing documentation. Multi-discipline or multi-department teams are employed to address the engineering needs of the plant, where necessary.

Analytical Engineering - This group is responsible for providing specialized or computer based analysis support to the various groups in the E&TS. Engineering

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 9 of 46</p> |
|--|---|

support provided by Analytical Engineering includes Accident Analysis, Probabilistic Risk Assessment, Piping Support and Stress Analysis, Equipment Qualification, Electrical Distribution and Coordination, Set Point Analysis, and Seismic Analysis/SQUG. Personnel assigned to this group are responsible for assuring their tools comply with the QA criteria for safety-related software, programmatic requirements, and commitments associated with their efforts.

KPB Services Manager

This position is responsible for plant activities associated with Chemistry, Health Physics, Industrial Safety, and Nuclear Emergency Preparedness. This position has the responsibility for review, approval, and verification of implementation of nuclear administrative directives affecting quality for his area of responsibility. Those areas of responsibility for the KPB Services Manager include:

Plant Radiation Protection – is responsible for radiation protection, plant health physics activities, and the Radiological Environmental Monitoring Program.

Plant Radiochemistry – is responsible for plant chemistry activities.

Industrial Safety – is responsible for site industrial safety activities.

Nuclear Emergency Preparedness - is responsible for the maintenance of an effective emergency preparedness program. Specific responsibilities and duties for the various nuclear emergency preparedness activities are defined in the appropriate directives and implementing procedures.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 10 of 46</p> |
|--|--|

KPB Business Group Manager

This position is responsible to the KPB Site Vice President for providing general support to the entire Nuclear Department in key business related areas, including administrative support, budgeting and planning, supply chain, development of strategic issues and business plans, project management, information technology, and information management. The areas of budgeting, supply chain, and information technology, receive direction from NMC corporate staff and support from WPSC corporate staff.

Information Management - is primarily responsible for receipt, maintenance, and overall control of records associated with the Kewaunee Nuclear Power Plant.

Information Technology – is responsible for the general onsite computer support and services.

Supply Chain – is responsible for the onsite procurement process for materials and services, warehousing and storage functions, and material control.

KPB Assessment Manager

This position is responsible for the leadership and supervision of the Kewaunee Plant Assessment Group, which includes site Licensing, Corrective Action Program (Kewaunee Assessment Process), Self Assessment / Process Improvement and Operational Experience Assessment activities. Also included are the Human Performance monitoring and Measurements/Performance Indicators. The areas of Licensing and Self Assessment receive direction and support from NMC corporate staff.

Kewaunee Nuclear Power Plant  
Operated by  
Nuclear Management Company, LLC

Operational Quality Assurance  
Program Description



Date: 07/11/01

Rev. 21-B

Page 11 of 46

KPB Training Manager - Nuclear Training has been delegated the responsibility to develop, maintain, and provide employee training that meets the needs of the Kewaunee Nuclear Power Plant (KNPP). Nuclear Training is responsible for the accredited training programs as described in National Academy of Nuclear Training Document 91-016, The Process for Accreditation of Training in Nuclear Power Industry. Specific responsibilities and duties for the various training activities are defined in the appropriate directives and implementing procedures.

Security Manager – This position is responsible for plant security and fitness for duty programs. Specific responsibilities and duties for the various protective service activities are defined in the appropriate directives and implementing procedures. The Security Manager is responsible to the NMC Director Security.

#### KPB Nuclear Oversight Manager

This position is responsible to the Director – Nuclear Oversight for ensuring that an Operational Quality Assurance Program (OQAP) is developed, implemented, and maintained to meet the licensing requirements and management objectives. This position is responsible for final review of changes to the OQAP. This position is responsible for review of directives which control activities affecting quality. The KPB Nuclear Oversight Manager is independent of cost and scheduling considerations and has the authority and organizational freedom to identify quality problems, stop work on non-conforming activities associated with modifications (new construction) until deficiencies have been corrected; initiate, recommend or provide solutions, and verify implementation of corrective actions. The KPB Nuclear Oversight Manager maintains stop work authority for nonconforming activities associated with plant operations by reporting them to the KPB Site Vice President. This position is responsible for ensuring that functions and activities of the Nuclear

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 12 of 46</p> |
|--|--|

Oversight (NO) Staff are controlled and performed in accordance with approved directives which implement the requirements of the OQAP. The Nuclear Oversight Staff has the responsibility for verifying the effectiveness of plant quality activities. The Nuclear Oversight Staff is comprised of:

Quality Control - Field inspection activities, which includes but is not limited to, material receipt, QC hold points, NDE, and other activities normally associated with traditional quality control.

Quality Assurance - Programmatic reviews and observations to determine program effectiveness and assessments normally associated with quality assurance auditing.

Qualified Suppliers - Review and evaluations of procurement activities, including but not limited to, purchase requisition documents, vendor and manufacturer evaluations.

The KPB Nuclear Oversight Manager shall as a minimum meet the requirements of ANSI N18.1-1971, and should have a minimum of a B. S. degree in Science or Engineering from an accredited college or university, a minimum of five years experience in power plant construction, engineering and/or plant operation, and a familiarity with codes and regulations.

Joint Offsite Review Committee (JOSRC)

JOSRC is responsible to the NMC President & CEO for review and audit of plant related matters concerning safety. The requirements for personnel, committee composition, meeting frequency, quorum and meeting records shall be as identified below and in accordance with the requirements of the JOSRC Charter. The

|  |  |
|--|--|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by<br/>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p style="text-align: right;"><br/>Date: 07/11/01<br/>Rev. 21-B<br/>Page 13 of 46</p> |
|--|--|

Committee periodically reviews the results of the Nuclear Oversight Staff audits and is responsible for conducting reviews as part of the Independent Technical Review Program.

1. Function

The JOSRC shall function to provide independent review and audit of designated activities in the areas of:

- A. Nuclear Power Plant Operations
- B. Nuclear Engineering
- C. Chemistry and Radio-Chemistry
- D. Metallurgy
- E. Instrumentation
- F. Radiological Safety
- G. Mechanical and Electrical Engineering
- H. Quality Assurance Practices
- I. Other appropriate fields as determined by the Committee, to be associated with the unique characteristics of the nuclear power plant.

2. Composition

The JOSRC shall be composed of, but not necessarily limited to:

- A. At least three technically qualified persons who are not members of the plant staff.
- B. One member from the supervisory staff of the plant.
- C. At least two qualified non-company affiliated technical consultants.
- D. In-house staff management advisors as required.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> |  <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 14 of 46</p> |
|--|---|

The Committee membership and its Chairman and Vice Chairman shall be appointed by the NMC President & CEO. Each member of the JOSRC shall have an academic degree in an engineering or physical science field; and in addition, shall have a minimum of five years technical experience, of which a minimum shall be in one or more areas given in paragraph 1., "Function".

3. Alternates

Alternate members shall be appointed by the JOSRC Chairman, upon approval by the NMC President & CEO, to serve on a temporary basis; however, no more than two alternates shall participate in JOSRC activities at any one time.

4. Consultants

Consultants may be utilized as determined by the Chairman - JOSRC to provide expert advice to the JOSRC.

5. Meeting Frequency

The JOSRC shall meet at least once every six months.

6. Quorum

A quorum of the JOSRC shall consist of the Chairman or Vice Chairman and four members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the plant.

7. Review

The JOSRC shall review:

- A. Safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of 10 CFR

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  <p><b>NMC</b><br/> <i>Committed to Nuclear Excellence</i></p> </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 15 of 46</p> |
|--|--|

50.59, to verify that such actions did not constitute an unreviewed safety question.

- B. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59.
- C. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59.
- D. Proposed changes in Technical Specifications or licenses.
- E. Reports covering violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- F. Reports covering significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- G. Reports covering all Reportable Events.
- H. Reports covering any indication of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems, or components.
- I. Reports and meeting minutes of the PORC.

8. Audits

Audits of plant activities shall be performed under the cognizance of the JOSRC. These audits shall include:

- A. Conformance of plant operation to the provisions contained within the Technical Specifications and applicable license conditions.
- B. Performance, training, and qualifications of the entire plant staff.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> |  <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 16 of 46</p> |
|--|---|

- C. Results of all actions taken to correct deficiencies occurring in plant equipment, structures, systems, or method of operation that affect nuclear safety.
- D. Performance of all activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR Part 50.
- E. The Plant Fire Protection Program, implementing procedures and the fire protection and loss prevention program.
- F. Any other area of plant operation considered appropriate by the JOSRC or the NMC President & CEO.
- G. The Radiological Environmental Monitoring Program and the results thereof.
- H. The Off-site Dose Calculation Manual and implementing procedures.
- I. The Process Control Program and implementing procedures for processing and packaging of radioactive wastes.

9. Authority

The JOSRC shall report to the NMC President & CEO and shall advise the President & CEO on those areas of responsibility specified in paragraph 7, "Review" and paragraph 8, "Audits".

10. Records

Records of JOSRC activities shall be prepared, approved and distributed as follows:

- A. Minutes of each JOSRC meeting forwarded to the NMC President & CEO within 14 days following each meeting.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 17 of 46</p> |
|--|--|

- B. Reports of reviews required by paragraphs 7.E through 7.H, forwarded to the NMC President & CEO within 14 days following completion of the review.
- C. Reports of audits performed by JOSRC shall be forwarded to the NMC President & CEO and to the management positions responsible for the areas audited within 30 days after completion of the audit.

Plant Operations Review Committee (PORC)

PORC is responsible to the Plant Manager for providing advice on matters relating to nuclear safety at the plant. The requirements for personnel, committee composition, meeting frequency, quorum and meeting records shall be as identified below and the PORC Charter. PORC is also responsible for conducting reviews as part of the Independent Technical Review Program.

1. Function

The PORC shall function to advise the Plant Manager on matters related to nuclear safety.

2. Composition

The PORC shall be composed of key supervisors of the on-site staff from the following disciplines: Operations, Maintenance, Instrument and Control, Reactor Engineering, Quality, and Radiological.

3. Alternates

Alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than two alternates for required members shall participate in PORC meetings at any one time.

|  |  |
|--|--|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"> <br/> Date: 07/11/01<br/> Rev. 21-B<br/> Page 18 of 46</p> |
|--|--|

4. Meeting Frequency

The PORC shall meet at least once per calendar month and as convened by the Chairman.

5. Quorum

A quorum of the PORC shall consist of the chairman (or his designated alternate) and a majority of the required members including temporary alternates.

6. Responsibilities

The PORC shall be responsible for:

- A. Review of operating, maintenance and other procedures including emergency operating procedures which affect nuclear safety as determined by the Plant Manager. Changes to those procedures are made in accordance with the provisions of TS 6.8.
- B. Review of all proposed tests and experiments that affect nuclear safety.
- C. Review of all proposed changes to the Technical Specifications.
- D. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- E. Review of all proposed changes to the Security Plan, Fire Plan, and their respective implementing procedures.
- F. Review all reports covering the investigation of all violations of the Technical Specifications and the recommendations to prevent recurrence.
- G. Review plant operations to detect potential safety hazards.

|   |   |
|---|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by<br/> Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> |  <p>Date: 07/11/01<br/> Rev. 21-B<br/> Page 19 of 46</p> |
|---|---|

- H. Performance of special reviews and investigations and prepare reports thereon as requested by the Chairman of Joint Offsite Review Committee.
- I. Review of all Reportable Events.
- J. Review of changes to the Process Control Program the Off-Site Dose Calculation Manual, and the Radiological Environmental Monitoring Manual.

7. Authority

The PORC shall:

- A. Recommend to the Plant Manager approval or disapproval of items considered under preceding paragraphs 6.A through 6.E.
- B. Make determinations with regard to whether or not each item considered under paragraph 6 constitutes an unreviewed safety question.
- C. Provide immediate notification in the form of draft meeting minutes to the Site Vice President and the Chairman - Joint Offsite Review Committee of disagreement between the PORC and the Plant Manager. The Plant Manager shall have responsibility for resolution of such disagreements.

8. Records

Minutes shall be kept of all meetings of the PORC and copies shall be sent to the KPB Site Vice President and the Chairman - Joint Offsite Review Committee.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  <p><b>NMC</b><br/> <i>Committed to Nuclear Excellence</i></p> </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 20 of 46</p> |
|--|--|

**QUALITY ASSURANCE TYPING COMMITTEE**

This Committee is responsible to the KPB Engineering Manager for changes to classification of systems, structures and components within the nuclear power plant according to the importance of the function they serve with respect to plant safety and operability. The description of the committee's duties and authority shall be established in various directives and the QA Typing Committee Charter.

**2.0 QUALITY ASSURANCE PROGRAM**

**1. General**

The Operational Quality Assurance Program complies with the requirements of 10CFR50, Appendix B, the provisions of ANSI N18.7-1976 and the Regulatory Guides which endorse the daughter standards required by ANSI N18.7-1976 with the exceptions, interpretations, and qualifications noted in Appendix A of this description. The requirements of the OQAP apply to those activities which affect the quality of structures, systems or components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. All structures, systems, and components are classified as QA Type 1, 2, 3 or N according to their function and importance in relation to the safe operation of the reactor, with emphasis on the degree of integrity required to protect the public. The OQAP requirements are mandatory for all QA Type 1 items. QA Type 2 and 3 items, as determined by management, may require special control and an "X" modifier may be added to the QA2 or QA3 type designation. All components and/or systems which are identified as Safety Class I in the Updated Safety Analysis Report (USAR) shall be categorized as QA Type 1. All nuclear fuel and core components shall be categorized as QA Type 1. The definitions and a list

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 21 of 46</p> |
|--|--|

of the Safety Class I, II and III structures, systems and components are found in the Kewaunee USAR Appendix B, Table B.2-1.

During construction, QA types were established for plant equipment by a QA typing committee. The QA types for equipment subsequently added to the plant are established by the Responsible Engineer who installs the equipment under the Plant Physical Change program. The Plant Physical Change program exists under the requirements of the OQAP. Therefore, the QA types of equipment added since construction are controlled under the OQAP and its definitions. A change to an established QA type must be approved by the QA Typing Committee.

**2. Requirements**

It is mandatory for applicable employees to comply with the OQAP. It is the responsibility of the management charged with the implementation of the program to inform personnel working for them that the quality policies, OQAP manual, and procedures have mandatory requirements which must be implemented and enforced. The KPB Training Manager is responsible for conducting training sessions as necessary to keep individuals informed of policies and changes to the OQAP. The lesson plans for these training sessions will be prepared under the cognizance of the Nuclear Oversight Staff.

The OQAP shall be applied to all activities affecting safety-related functions and include: physical changes, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, modifying, engineering, and training. The control over these activities shall be applied to an extent consistent with their importance to safety and shall take into account the need for special controls, processes, tests, equipment, tools,

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 22 of 46</p> |
|--|--|

and skills to attain the required quality, and the need for verification of quality by inspection, evaluation, or test.

**3. Structure**

The OQAP manual is the top level quality program document for operational phase activities. The OQAP is a manual which incorporates the requirements of 10CFR50 Appendix B, the provisions of ANSI N18.7-1976 and ANSI N45.2.23-1978 and Regulatory Guides 1.8-Rev. 1, 1.30, 1.37, 1.38-Rev. 2, 1.39-Rev. 1, 1.54, 1.58-August, 1973, 1.64-Rev. 2, 1.74, 1.88-Rev. 2 and 1.94. The requirements and responsibilities identified by the manual are implemented through directives, procedures, and instructions which prescribe activities affecting quality. Technical reviews of directives are provided by department heads or process owners. Review of Nuclear Administrative Directives, and Fuel Management Directives for consistency with the OQAP is provided for by the KPB Nuclear Oversight Manager.

Nuclear administrative directives are reviewed and approved by the appropriate responsible Director/Manager. These directives are prepared to govern activities affecting quality, such as physical changes, procurement, licensing, training, document control, operation, procedure control, material control, maintenance, and other related activities.

Fuel Management Directives are reviewed and approved by the Project Manager – Kewaunee/Point Beach and are prepared to govern fuel management activities affecting quality, such as fuel procurement, reactor core performance and analysis, core design, and other related activities.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by</i><br/>Nuclear Management Company, LLC</p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p style="text-align: right;"><br/>Committed to Nuclear Excellence</p> <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 23 of 46</p> |
|--|---|

**4. Management Review**

Management above or outside the Nuclear Oversight organization shall routinely be informed of the status and adequacy of the OQAP. Audits of implementing directives shall be conducted to verify conformance to the program. Nonconformances or differences of opinion which cannot be settled between Nuclear Oversight and the department involved shall be brought to the attention of upper management for resolution.

**5. Indoctrination and Training**

A training program shall be established in order to provide for developing and maintaining a staff qualified to operate, maintain and provide the necessary technical support. The indoctrination and training program shall provide for:

- A. Training personnel responsible for performing quality-affecting activities as to the purpose, scope and implementation of the quality-related manuals, instructions, and procedures.
- B. Establishing the scope and depth of indoctrination and training to be provided commensurate with the level of quality-affecting activities being performed by an individual.
- C. Training personnel who perform quality-affecting activities in the principles and techniques of the activity being performed.
- D. Training and retraining on an as-needed basis to maintain a level of quality commensurate with the quality-affecting activity being performed.
- E. Maintaining records of training sessions, attendance and content of the training session.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> |  <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 24 of 46</p> |
|--|---|

### 3.0 DESIGN CONTROL

Modifications to systems that are nuclear safety related, or as described in the USAR, and considered significant for nuclear safety shall be controlled by a Plant Physical Change Program established by directives to ensure compliance with the existing design and the requirements of 10CFR50.59. Directives shall be prepared to augment the following aspects of the Plant Physical Change Program:

1. Establish the structure, authority and responsibilities of the groups or positions involved in design change activities.
2. Correctly translate design inputs into specifications, drawings, procedures, or instructions.
3. Identify and select the appropriate quality standards in design documents.
4. Select and review the suitability of materials, parts, equipment and processes essential to the safety-related functions of the structure, system, or component.
5. Assure that computer software, which is an integral part of the operation of equipment, is designed, documented and tested adequately.
6. Assure the change is subject to at least the same measures applied to the original design, and provide for a second level review.
7. Assign the responsibilities of all organizations involved in the Plant Physical Change process, both internal (KNPP) and external (contractor, vendor) and ensure a method of exchanging technical information across internal and external interfaces.

PORC shall be responsible for reviewing proposed changes or modifications that affect nuclear safety. JOSRC shall review the safety evaluation of changes

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  <p><b>NMC</b><br/> <i>Committed to Nuclear Excellence</i></p> </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 25 of 46</p> |
|--|--|

completed under the provision of 10CFR50.59 to verify that such actions do not constitute an unreviewed safety question.

#### **4.0 PROCUREMENT DOCUMENT CONTROL**

Measures shall be established in directives to provide for the preparation of procurement documents to ensure that applicable regulations, design bases, and other QA program requirements are included or referenced. Procurement documents shall include, as appropriate: the scope of work; technical requirements; documentation requirements; requirements for hold and witness points; the allowance for access to supplier's facilities for review or audit of documentation or manufacturing procedures; and requirements that the supplier has a documented QA program in accordance with 10CFR50, Appendix B which includes a means for disposition of nonconformances.

The directives shall include measures to ensure that procurement documents are reviewed and approved by qualified and authorized personnel prior to release. The directives shall also provide assurance that the procurement document review includes a verification that quality requirements are stated in such a manner, that through either source surveillance and inspecting, supplier audits, or receipt inspection, the quality of the procured items may be verified.

#### **5.0 INSTRUCTIONS, PROCEDURES, AND DRAWINGS**

Measures shall be established in appropriate directives to control the preparation, format, content, and use of operating, test and maintenance procedures, and approvals for same. When required, they shall be prepared in sufficient detail to

|   |  |
|---|--|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by</i><br/><i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p style="text-align: right;"><br/><i>Committed to Nuclear Excellence</i></p> <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 26 of 46</p> |
|---|--|

provide adequate guidance in performing activities affecting quality. These procedures shall include, as appropriate, initial conditions, step-by-step instructions, sign-off steps, acceptance criteria, etc., to ensure that activities affecting quality have been satisfactorily completed.

A Plant Physical Change Program shall be established by directives to assure that instructions, procedures, and drawings are used, where appropriate, to control activities associated with the modification of safety systems described in the USAR.

These directives shall establish a method to update drawings, procedures, and other technical documents associated with the plant modification.

## 6.0 DOCUMENT CONTROL

The generation, distribution, and revisions of documents that establish specifications or activities affecting quality shall be controlled by formal directives.

These directives shall provide for the following document control measures:

1. Identification of individuals or organizations responsible for preparing, reviewing, approving, and issuing documents and revisions, thereto.
2. Identifying and providing the proper documents to be used in performing safety-related activities.
3. Establishing distribution.
4. Establishing a method of providing up-to-date documents to the controlled files.

|  |  |
|--|--|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"> <br/> Date: 07/11/01<br/> Rev. 21-B<br/> Page 27 of 46</p> |
|--|--|

**7.0 CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES**

Suppliers of material, equipment and services, including suppliers of spare or replacement parts, shall be selected based on an evaluation of the supplier's capability to provide the purchased items or services in accordance with the requirements of the procurement documents. Directives shall include methods for source evaluation and selection. One or more of the following considerations shall be included for source evaluation: evaluation of the supplier's history of providing a product which performs satisfactorily in actual use; review of industry directories; review of whether the prospective supplier has a quality assurance program reviewed and inspected by the NRC under the Vendor Inspection Program; review of whether the prospective supplier has been recently audited by NUPIC (Nuclear Utilities Procurement Issues Committee) or similar third party inspection publication; review and evaluation of the supplier's Quality Assurance Program, Manual and Procedures, and the supplier's design and manufacturing capability; and a NMC survey of the prospective supplier's technical and quality capability by directly evaluating his facilities, personnel and the implementation of his quality assurance program.

A Qualified Suppliers System shall be established and maintained by directives developed under criteria imposed by the Operational Quality Assurance Program. Material, equipment, or services purchased from suppliers not on the Qualified Suppliers System shall undergo a review and evaluation to ensure conformance to the acceptable criteria established by the Quality Assurance Program. Directives shall also establish control measures to ensure that documentary evidence of the conformance of material and equipment to procurement requirements is available prior to installation or use.

Kewaunee Nuclear Power Plant  
*Operated by*  
*Nuclear Management Company, LLC*

**Operational Quality Assurance  
Program Description**

**NMC**  
*Committed to Nuclear Excellence*

Date: 07/11/01

Rev. 21-B

Page 28 of 46

## **8.0 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS**

Controls established for procurement shall ensure that safety-related materials, parts, and components are purchased under the requirements and documentation established by the Operational Quality Assurance Program. Implementing directives shall provide for a documented receipt and inspection of incoming material and equipment, along with providing a system for identifying the status of acceptable items to ensure use and installation of only correct and acceptable materials. Identification and traceability of safety-related materials, parts, or components from issuance to installation within the plant shall be provided by this system.

## **9.0 CONTROL OF SPECIAL PROCESSES**

Special processes including welding and non-destructive examination shall be accomplished under controlled conditions by qualified personnel, in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

The Operational Quality Assurance Program is established to ensure compliance and implementation of these requirements.

## **10.0 INSPECTION**

Concerning material receipt, directives shall establish a receipt inspection under the control of the KPB Nuclear Oversight Manager, which provides for visual

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  <p><b>NMC</b><br/> Committed to Nuclear Excellence</p> </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 29 of 46</p> |
|--|---|

examination, receipt of required documentation, verification of identification, and on-site technical inspection.

Concerning modifications, the Plant Physical Change Program provides for the following requirements: special processes, test, measuring and test equipment, and cleanliness. The work package shall be reviewed by site Nuclear Oversight personnel who have been appropriately trained to ensure that the required special installation procedures are included in the package or properly referenced. Verification of conformance to established requirements shall be performed by individuals or groups who do not have direct responsibility for performing the work being verified. Personnel or groups assigned responsibility for verification of inspection or testing shall be delineated in appropriate procedures and directives.

Plant personnel performing inspection, examination, and testing functions which are associated with normal operations of the plant and certain technical reviews normally assigned to the on-site operations organization shall be qualified to ANSI N18.1-1971.

Plant personnel who will be performing inspection, examination, and testing functions which are not associated with normal operations of the plant shall be trained and qualified in accordance with the requirements of Regulatory Guide 1.58, "Qualification of Nuclear Power Plant Inspection, Examination and Testing Personnel", and 10CFR50.55a, Subsection g, "Inservice Inspection Requirements", which endorse, with specific exceptions, ANSI N45.2.6-1973, "Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants", except that QA experience cited for levels I, II, and III shall be interpreted to mean actual experience in carrying out the type of activity being

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 30 of 46</p> |
|--|--|

performed. Nuclear Oversight personnel will be qualified to these references with the noted exceptions. Non-plant personnel who perform plant inspections, examinations and testing shall be trained and qualified in accordance with the above stated paragraph.

Additionally, this also applies to contract personnel working under the site OQAP. Suitable review and acceptance must be made for qualification to other revisions or other standards the contractor's program may specify. Training of personnel performing activities affecting quality shall be conducted to ensure that suitable proficiency is achieved and maintained.

**11.0 TEST CONTROL**

A preoperational test program was conducted to demonstrate that structures, systems, and components would perform up to quality standards. A continuing operational test program is being conducted in accordance with Technical Specification surveillance requirements to ensure the operability of safeguard and safety-related structures, systems, and components. Plant directives and procedures shall provide for the prerequisites, evaluation, and documentation of these test results.

When required, the Work Request and Plant Physical Change Program shall provide for the testing and evaluation of test results for replacement, repaired, or modified structures, systems, or components.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 31 of 46</p> |
|--|--|

**12.0 CONTROL OF MEASURING AND TEST EQUIPMENT**

Measuring and test equipment and reference standards (calibration standards) used for measurements, tests and calibration respectively, shall be of the proper range and type and shall be controlled, calibrated and adjusted, and maintained at specified intervals or prior to use to assure the necessary accuracy of calibrated devices. The referenced standards used shall have an accuracy range and stability which are adequate to verify that the equipment being calibrated is within required tolerance. The reference standards used shall be adequate for the requirements of the equipment being calibrated, shall be recertified against higher level equipment of closer tolerance, and shall be traceable to nationally recognized standards. The method and interval of calibration for measuring and test equipment and reference standards shall be specified and shall be based on the type of equipment, its characteristics and other conditions affecting calibration. When measuring and testing equipment or reference standards are found to be out of calibration, an evaluation shall be made of previous inspections and test results and acceptability of the items previously inspected.

**13.0 HANDLING, STORAGE, AND SHIPPING**

Nuclear administrative directives shall provide a system for material and equipment handled at and shipped from the plant to prevent damage, deterioration or loss. Where necessary, for sensitive or high value items, specific written instructions or procedures will be utilized. Where necessary, special handling tools and equipment will be utilized.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 32 of 46</p> |
|--|--|

Directives shall provide for special provisions for the control of items which might cause risk to the general public if damage should occur.

Directives shall also provide a system for controlling material during storage to prevent damage, loss, deterioration, or environmental damage. Housekeeping practices shall be controlled to prevent degradation in item quality.

#### 14.0 INSPECTION, TEST, AND OPERATING STATUS

The measures required in this criteria are applied to two general categories, material control and operational control. Inspection, test, and operating status provided by the material control program is implemented through plant directives which are controlled by the Nuclear Oversight organization. Operational control, including the status of inspections, tests, and operations activities is described in plant directives which are controlled by the Operations and Planning and Scheduling organizations. All changes in procedures for these categories are reviewed by management. If the need for bypassing of a required inspection, test, or other critical operation occurs, it shall be procedurally controlled and reviewed by management.

##### 1. Material Control

A receipt inspection at the plant site shall identify the status of acceptable items and shall provide for the control of uninspected and nonconforming items to ensure use and installation of only correct and acceptable materials.

Physical identification shall be used to the maximum extent possible to identify the status of materials inspected. The system shall provide for

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 33 of 46</p> |
|--|---|

documentation traceable to the item and segregation and disposition of nonconforming items to preclude misuse.

2. Operational Control

The work control program shall include provisions for taking equipment out of service, identification of that equipment, and precautions or prerequisites for returning that equipment to service. The work request and supplemental documents shall be reviewed by Nuclear Oversight personnel to ensure that special processes, inspection (hold and witness points) and testing requirements are adequately specified. They are also reviewed by operations personnel to determine the effect on plant operations, the proper tagging out of service of equipment, and the protection of personnel and equipment.

**15.0 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS**

When a nonconforming item is identified during a receipt inspection, the condition shall be documented on a Material Nonconformance Report and the item identified or segregated to preclude misuse, further processing, or installation pending disposition. Material Nonconformance Reports will be controlled and evaluated by cognizant plant personnel for the determination of the disposition of nonconforming items. Material Nonconformance Reports and dispositions shall be submitted to the responsible organization for implementation of corrective action. Provisions shall be established to ensure that items dispositioned as "repair" or "rework" shall be reinspected and require documentation verifying the acceptability of the item prior to release for use.

Kewaunee Nuclear Power Plant  
Operated by  
Nuclear Management Company, LLC



Date: 07/11/01

Rev. 21-B

Page 34 of 46

**Operational Quality Assurance  
Program Description**

## 16.0 CORRECTIVE ACTION

Conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective materials and equipment (post-receipt inspection), and nonconformances shall be documented and reported in accordance with approved procedures. These reports provide the mechanism for all personnel to notify management of conditions adverse to quality. Measures shall be provided for the prompt processing of these reports to ensure expeditious investigation, evaluation, and implementation of corrective action. For situations determined to be significantly adverse to quality, investigations shall not only provide for identifying and correcting the condition, but also for determining the cause of the condition to ensure that corrective action is taken to preclude its recurrence.

Measures shall be established to ensure that reports of conditions adverse to quality are promptly prepared and reviewed for events which may be potentially reportable to the NRC. These reports shall be evaluated by management for safety implications and Technical Specifications violations. The system shall provide for determination of corrective action to be taken, implementation of the corrective action, and final close out.

Measures shall be established in appropriate directives and Quality Procedures to document and control audit findings. These measures shall include a description of the unacceptable condition, corrective action to be taken, response time, verification of implementation of appropriate corrective action, and close out of the deficiency generated as a result of audits. These findings shall be documented in accordance with approved procedures. Corrective action taken for audit findings

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 35 of 46</p> |
|--|--|

shall be reviewed and verified. Disagreement between Nuclear Oversight and the audited organization regarding corrective action shall be pursued through responsible management with the final authority resting with the Site Vice President.

Technical deficiencies and recommendations generated during technical reviews shall be documented with the report. Technical deficiencies and recommendations shall be submitted to the appropriate Manager for disposition as deemed necessary.

## 17.0 QUALITY ASSURANCE RECORDS

Directives shall be prepared to control records that are generated during the operation of the Kewaunee Nuclear Power Plant. These directives shall identify the types of records that are to be controlled including requirements for storage.

Records shall be primarily maintained in the KNPP QA Vault, the main records storage facility. Frequently used records, not stored in the KNPP QA Vault shall be maintained in accordance with procedures which provide for proper control and protection of the records. Records may be maintained using microfilm, optical disk, or other approved technology provided appropriate quality control provisions have been established in the controlling procedures.

Records shall be kept for the prescribed periods of time in accordance with the requirements of Technical Specifications or Regulations. Directives shall provide for a system that permits the retrieval of information in a reasonable amount of time.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"> <br/> <b>NMC</b><br/> <i>Committed to Nuclear Excellence</i> </p> <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 36 of 46</p> |
|--|---|

## 18.0 AUDITS

Audits shall be conducted in accordance with appropriate directives, procedures, or instructions to verify that the requirements of the QA program are being implemented. Audits shall be conducted on, but not limited to, power plant operating and maintenance activities, engineering staff activities, Fuel Management activities, Purchasing Department activities, and Supplier activities. A comprehensive system of planned and documented audits shall be carried out to verify compliance with all aspects of the administrative controls and quality assurance program. Audits of selected aspects of operational phase activities shall be performed with a frequency commensurate with their safety significance and in such a manner as to assure that an audit of all safety-related functions is completed within a period of two years. A quality assurance program has been developed to cover the auditable portions of the Technical Specifications over a five year interval.<sup>1, 2</sup> Audits shall be performed by experienced personnel trained, in accordance with ANSI N45.2.23-1978, and independent of any direct responsibility of the activity being audited.

Preparation of procedures for audits, documentation of audit findings, and issuance of audit reports shall be described by applicable directives or procedures. Supervisory personnel of the audited activity shall review the audit report and provide corrective actions. Follow-up action shall be provided for by the OQAP to ensure that corrective action is implemented and adequate.

|  |  |
|--|--|
| <p><b>Kewaunee Nuclear Power Plant</b><br/><i>Operated by</i><br/><b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p><br/><b>NMC</b><br/><i>Committed to Nuclear Excellence</i></p> <p>Date: 07/11/01</p> <p>Rev. 21-B</p> <p>Page 37 of 46</p> |
|--|--|

<sup>1</sup> Letter from C. W. Giesler (WPSC) to J. F. Streeter (NRC) dated August 22, 1983.

<sup>2</sup> Letter from R. L. Spessard (NRC) to C. W. Giesler (WPSC) dated September 30, 1983.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 38 of 46</p> |
|--|--|

**APPENDIX A**

**ANSI N18.7-1976 EXCEPTIONS, INTERPRETATIONS, QUALIFICATIONS**

**General**

ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants" is adopted to provide a basis for establishing an operational quality assurance program that meets the requirements of 10CFR50 Appendix B. This standard provides an acceptable means to satisfy the criteria of 10CFR50 Appendix B, but does not limit the use of alternate means to ensure safe operation of the plant. In this regard, those portions of this standard to which exceptions, interpretations and/or qualifications are taken are listed below.

Standards in general present objectives to be met with the method of implementation left general enough to provide for various interpretations for implementation. In the review of the program in accordance with the adoption of these new standards, many changes in implementation have been made. Where questions of interpretation were raised a conscientious interpretation has been formalized with the Nuclear Oversight staff. Wherever future questions of interpretation arise they will be decided in a similar manner with continued disagreement being brought before corporate management for resolution.

When a short term or one time contradiction to the program is discovered, a non-conformance action will be taken within the Nuclear Oversight organization to ensure a conscientious effort to maintain a quality level equivalent to the safety significance of the activity involved. When a long term or permanent contradiction to the program exists, a program change shall be implemented providing the same level of review as the adoption of this program, and the change will be submitted to the NRC.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 39 of 46</p> |
|--|--|

Finally, wherever Technical Specifications overlap or contend with the administrative controls provided for in this program, the Technical Specifications will take precedence.

## **PARTICULAR EXCEPTIONS AND QUALIFICATIONS**

### **ANSI N18.7-1976**

#### **Section**

- 3.1** Administrative controls shall be established necessary to comply with this standard as adopted, with the exceptions, interpretations, and qualifications addressed in this transmittal.
- 5.2.7.2** This paragraph requires that design activities associated with modification of safety-related structures, systems, and components shall be accomplished in accordance with ANSI N45.2.11-1974. We will commit to apply this standard to those design activities which we deem are comparable in nature and extent to similar construction related activities, the provisions of which shall be employed as applicable to the degree of importance to safety for the design project under consideration. We shall also adopt the Regulatory Position of Regulatory Guide 1.64, Rev. 2, June 1976, as requested with an exception to position C.2. We will follow our existing practice that design verification should not be performed by the originator's supervisor, except where expertise is not available other than the supervisor immediately responsible for the design.
- 5.2.9** This section requires that procedures be developed to supplement features and physical barriers designed to control access to the plant and, as appropriate, to vital areas within the plant. Plant security and visitor control measures are implemented in accordance with the Kewaunee Security Manual, required by 10 CFR 50.34(c).

Kewaunee Nuclear Power Plant  
Operated by  
Nuclear Management Company, LLC

Operational Quality Assurance  
Program Description



Date: 07/11/01

Rev. 21-B

Page 40 of 46

**5.2.12** This section specifies that ANSI N45.2.9-1974, "Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants", shall be used for management of plant records during the operational phase. Compliance with the provisions of this standard and the Regulatory Position of Regulatory Guide 1.88, Rev. 2, October 1976, shall be deemed applicable to the nature and scope of the work being performed and the importance of the item or service involved with the exceptions noted below.

**5.2.15** This section requires that plant procedures which govern safety-related activities shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. KNPP has alternate programs in place that make a biennial review process unnecessarily duplicative. These alternate programs ensure procedures are periodically reviewed and maintained current when pertinent source material is revised, plant physical changes are made, and/or any deficiencies occur. KNPP will also implement measures specifying that infrequently scheduled plant procedures that have not been used or reviewed for two years should be reviewed before use. Due to the significance of the Integrated Plant Emergency Operating Procedures (IPEOP's), the biennial review of the IPEOP's will be continued. Alternate programs in place include the following:

1. Technical Specification revision process

This process includes a review of affected plant procedures upon the approval of a Technical Specification Amendment and subsequent revisions as appropriate.

|   |  |
|---|--|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by</i><br/><i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p style="text-align: right;"><br/>Date: 07/11/01<br/>Rev. 21-B<br/>Page 41 of 46</p> |
|---|--|

2. Physical Change Program

Nuclear department heads are notified of modifications and are requested to review affected plant procedures. Revisions to procedures are verified as part of the Physical Change closeout process.

3. Various Self-Assessment Programs

During self-assessment activities, procedures may be identified that contain significant discrepancies. Revisions are made as appropriate.

4. Kewaunee Assessment Process (KAP)

Any procedures identified as being in need of revision during the KAP evaluation process are revised before the KAP corrective action is closed out.

5. Quality Assurance Program

At least every two years, a surveillance will be performed whereby randomly selected safety-related procedures would be checked for added assurance of timely revision of procedures.

6. Operating Experience Assessment Program

During operating experience assessment activities, procedures may be identified that contain significant discrepancies or require change. Revisions are made as appropriate. Significant changes to vendor manuals are evaluated as part of this program.

|   |  |
|---|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by<br/> Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11/01</p> <p style="text-align: right;">Rev. 21-B</p> <p style="text-align: right;">Page 42 of 46</p> |
|---|--|

**ANSI N45.2.9-1974**

**Section**

**4.3 & 4.4 Concerning Receipt Control.**

The Records Management Group has been designated as the group responsible for receiving and storing records. This staff does not control which records are sent to them, however, there is a record index system identifying which records are under the control of the QA Program. We have assigned responsibility for assuring QA records are retained in the KNPP QA Vault to the various department heads or process owners. Also there is no log of incoming records. However, the previously-mentioned index is kept up to date and serves as a list of records received and retained. We have a procedure which partially covers the receipt control of records but none specifically for this action. We do not plan at this time to implement any further controls on the receipt of records.

**ANSI N45.2.9-1974**

**Section**

**5.6 Concerning Permanent and Temporary Storage Facilities.**

Criteria specified in this paragraph for those records stored in the KNPP QA Vault are met; however, the use of temporary storage facilities, the definition of a working QA document and the transport of QA records to the vault differ.

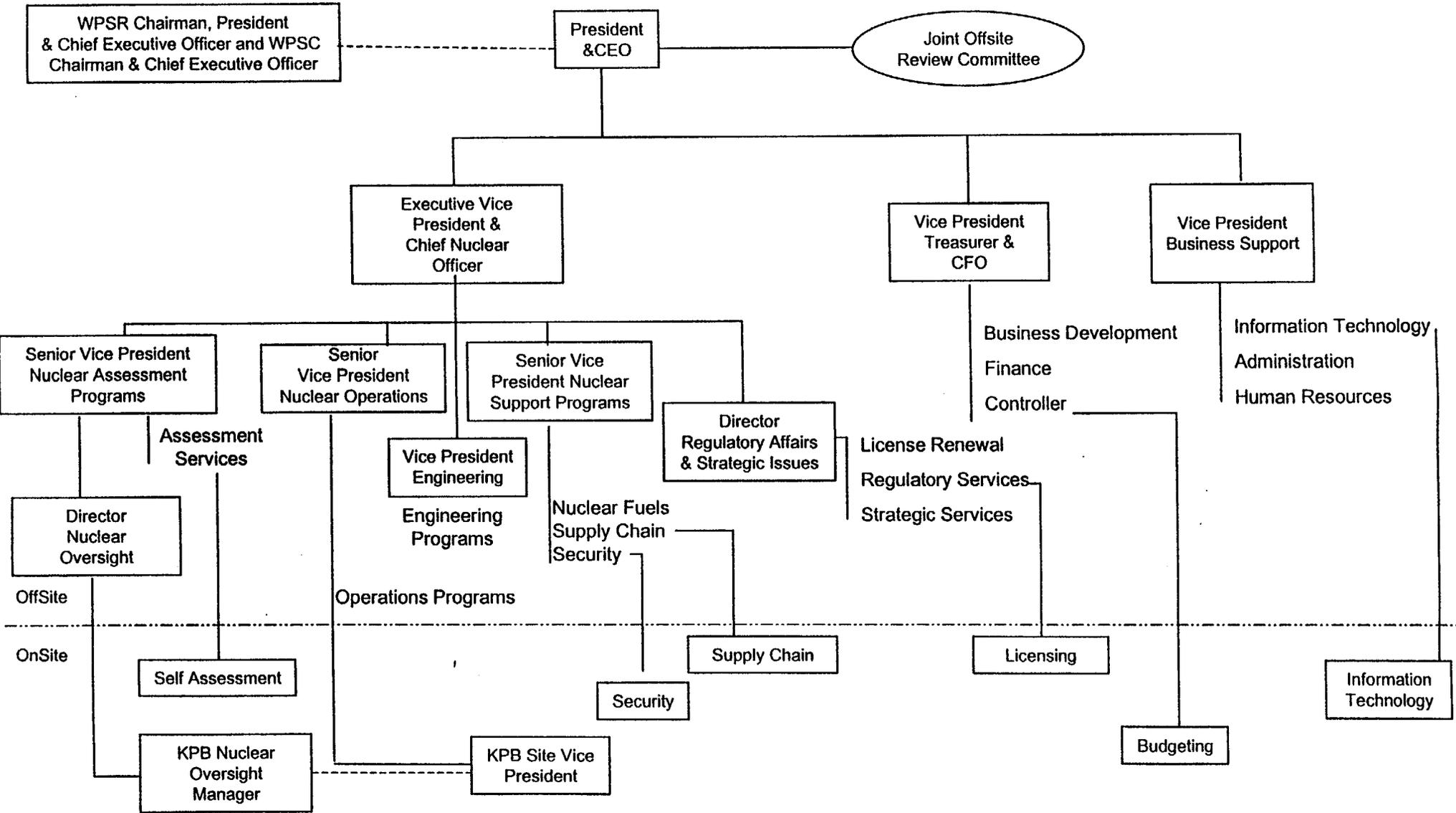
Several in-house generated QA documents/records are maintained in working files, e.g., JOSRC Meeting Minutes, training records and radiological survey data. These documents/records which we feel are working documents until no longer used on a routine basis are kept in locked, fire-proof file cabinets and are periodically transferred to the

|  |   |
|--|---|
| <p><b>Kewaunee Nuclear Power Plant</b><br/><i>Operated by</i><br/><b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p><br/>Date: 07/11/01<br/>Rev. 21-B<br/>Page 43 of 46</p> |
|--|---|

KNPP QA Vault. Duplication or filing in the vault would be unacceptable due to the quantity and frequent use of these documents.

We find our handling of these documents acceptable due to the relative short duration of filing in temporary quarters and relative insensitivity of these documents to the safety of the plant. Finally, we do not have a courier service to immediately transfer a QA record just completed to the vault. Some records are transferred by personal delivery and others through the routine in-company mail service. At this time we do not plan to implement any further controls on transferring documents to the KNPP QA Vault.

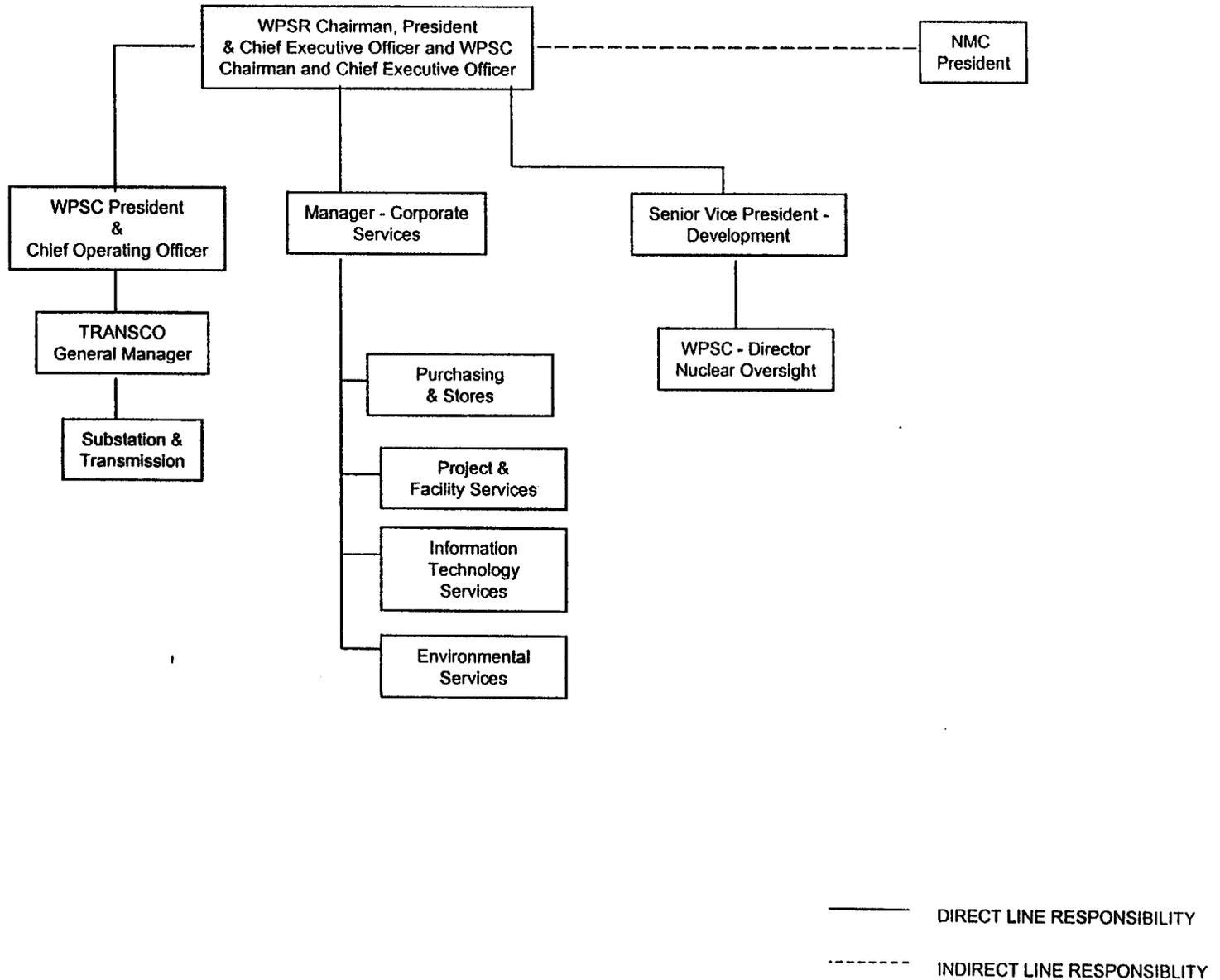
NMC OFFSITE FUNCTIONAL QUALITY ASSURANCE ORGANIZATION



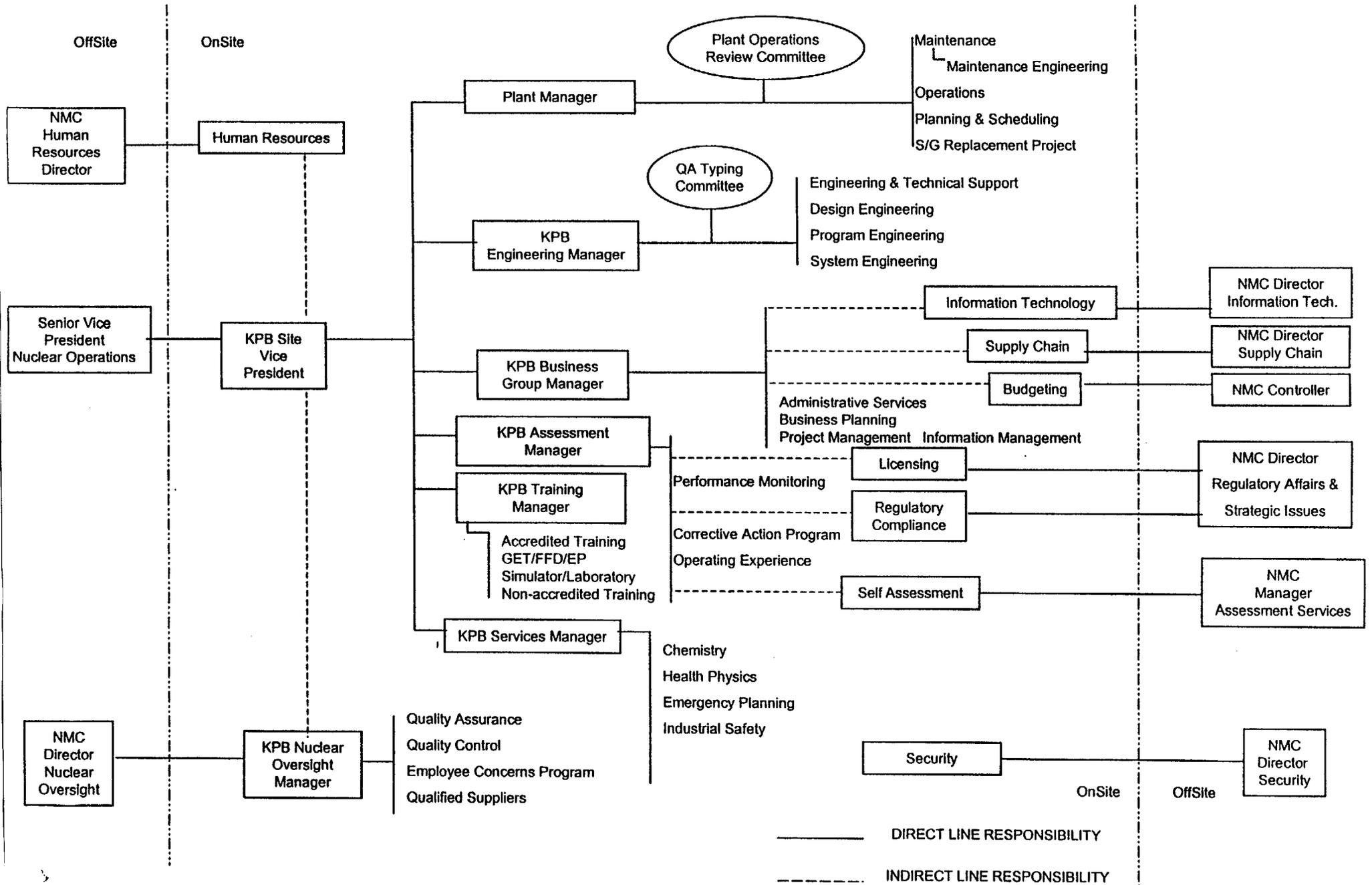
———— DIRECT LINE RESPONSIBILITY  
- - - - - INDIRECT LINE RESPONSIBILITY

FIGURE 2

Wpsc OFFSITE FUNCTIONAL QUALITY ASSURANCE ORGANIZATION



ONSITE FUNCTIONAL QUALITY ASSURANCE ORGANIZATION



|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/113/04/01</p> <p style="text-align: right;">Rev. 24-A1-B</p> <p style="text-align: right;">Page 1 of 4645</p> |
|--|--|

## INTRODUCTION

The policy of Nuclear Management Company, LLC is to comply with the requirements of the Operational Quality Assurance Program (OQAP) which is authorized under the direction of the President & CEO – Nuclear Management Company. The OQAP fulfills the requirements of 10CFR50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." Compliance with the OQAP is mandatory for applicable Nuclear Management Company and Wisconsin Public Service Corporation employees. Equivalent measures appropriate to the circumstance shall be enforced upon suppliers of materials, equipment or services.

Wisconsin Public Service Corporation (WPSC) entered into a Nuclear Power Plant Operating Services Agreement (NPPOSA) with the Nuclear Management Company, LLC (NMC). Under the service agreement, the NMC is designated as the Contracting Owner of the Facility Operating License (NRC No. 50-305) for the Kewaunee Nuclear Power Plant and is responsible for the operation and maintenance of the plant in accordance with the terms and conditions of the license. Ownership of the Kewaunee Nuclear Power Plant assets remains with Wisconsin Public Service Corporation and is not affected by the transfer of operating authority.

The Operational Quality Assurance Program is established to define, implement and audit operation, maintenance, and modification activities related to nuclear plant safety. The OQAP complies with the provisions of ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," with exceptions, interpretations, and qualifications noted in Appendix A of this description.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/113/04/01</p> <p style="text-align: right;">Rev. 24-A1-B</p> <p style="text-align: right;">Page 2 of 4645</p> |
|--|--|

**1.0 ORGANIZATION**

**1. General Requirements**

The NMC shall be responsible for the establishment and implementation of the Operational Quality Assurance Program. All members of the organization involved in operation of the Kewaunee Nuclear Power Plant (KNPP) shall be made aware of and recognize the necessity for well formulated and detailed administrative controls to assure safe and efficient operation. Lines of authority, responsibility and communication are established under the direction of the NMC President & Chief Executive Officer and identify all levels of management involved in the OQAP, (See Figures 1, 2 & 3). The quality assurance functions performed by each organizational element are cited in the descriptions below.

**2. Duties and Responsibilities – Nuclear Management Company (Figure 1)**

President & Chief Executive Officer (CEO)

This position is responsible for providing top level direction of all activities associated with the safe and reliable operation of NMC’s nuclear sites. The President & CEO provides guidance with regards to company quality assurance program. This position has delegated specific authority and responsibilities as described in the following, and as shown in Figure 1.

Senior Executive Vice President & Chief Nuclear Officer (CNO)

This position has responsibility for all matters relating to the operation and maintenance of the Kewaunee Nuclear Power Plant. Reporting to the Senior Executive Vice President & Chief Nuclear Officer, are the Senior Vice

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> |  <p>Date: 07/113/04/01</p> <p>Rev. 24-A1-B</p> <p>Page 3 of 4645</p> |
|--|---|

Presidents Nuclear Operations, Senior Vice President Nuclear Support Programs, and Senior Vice President Assessment Programs. ~~Vice Presidents — Operations, and Vice President Engineering.~~ The Senior Executive Vice President & CNO has delegated specific authority and responsibility to these positions as shown in Figure 1.

Senior Vice President — Nuclear Operations

This position is responsible for managing the site organizations' operations by directing and coordinating activities consistent with established goals, objectives, and policies. Follows directions set by the CNO, President, and Board of Directors. -Provides direction and structure for the operating units. Participates in developing policy and strategic plans.

Senior Vice President — ~~Operation~~ Nuclears Support(2 each) Programs

~~This~~is position, along with vice president support,~~s are~~is responsible for the support of operations for the Kewaunee Nuclear Power Plant, including, but not limited to, nuclear fuel design, high level waste management, security, procurement, warehousing, and support for emergency planning.

Senior Vice President Nuclear Assessment Programs

This position is responsible for the overall quality assurance, oversight and assessment activities. Under this Senior Vice President, the Director Nuclear Oversight has primary responsibility for the QA Program Description, corporate directives, internal audit program, supplier qualification program, quality control program services for applicable sites, off-site review committee coordination, and Employee Concerns Program.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 4 of 4645</p> |
|--|---|

Vice President – Engineering

This position is responsible for providing engineering support, and services, including, but not limited to, program engineering, design changes, design analyses, and engineering evaluations of plant performance.

Director – Regulatory Affairs & Strategic Issues

This position is responsible for the overall regulatory services associated with licensing activities. This position is also responsible for license renewal programs.

Vice President – Business Support

This position is responsible for administrative, ~~communications~~, human resources, and information technology services.

Vice President – Treasurer & CFO

This position is responsible for business development and planning, finance, accounting, and payroll.

~~Director – Regulatory Services & Strategic Issues~~

~~This position is responsible for the overall regulatory services associated with licensing activities. This position is also responsible for license renewal programs.~~

~~Senior Vice President – Assessment & Performance Improvement~~

|   |   |
|---|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by<br/> Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"><b>NMC</b><br/> <i>Committed to Nuclear Excellence</i></p> <p>Date: 07/11/04/01</p> <p>Rev. 21-A1-B</p> <p>Page 5 of 4645</p> |
|---|---|

~~This position is responsible for the overall quality assurance, oversight, and assessment activities.~~

~~Director Nuclear Oversight~~

~~The Director Nuclear Oversight reports to the Senior Vice President Assessment and Performance Improvement and has primary responsibility for QA Program Description, corporate directives, internal audit program, supplier qualification program, quality control program services for applicable sites, off-site review committee coordination, and Employee Concerns Program.~~

**3. Duties and Responsibilities – Wisconsin Public Service Corporation Offsite**

~~(Figure 2)~~

Senior Vice President – Energy Supply Development

This position has responsibility for the generation, transmission, and planning for all of Wisconsin Public Service Corporation. This position reports directly to the Chairman, President and Chief Executive Officer of WPS Resources, who is also the WPSC Chairman and Chief Executive Officer for nuclear responsibilities. This position is responsible for monitoring and managing of the KNPP asset, performing cost benefit analysis and those licensing responsibilities associated with KNPP that are maintained within WPSC. This position is responsible for interface activities with the Nuclear Management Company.

Manager - Corporate Services

This position reports to the President WPSC Chairman and Chief Operating Executive Officer for nuclear responsibilities. This position is responsible for the

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 6 of 4645</p> |
|--|---|

implementation of the Operational Quality Assurance Program requirements associated with the activities affecting quality performed by the Purchasing and Stores Group, Project & Facility Services, Information Technology, and Environmental Services involving KNPP and ensuring support is available for special projects involving KNPP.

The Purchasing and Stores Group is responsible for providing support to procurement activities for KNPP. The Project & Facility Services Group is responsible for providing engineering and design support for KNPP, as requested.

They also have responsibility for preparation, review, revision and issue of appropriate directives controlling engineering activities performed primarily by this group. The Information Technology Services is responsible for providing for computer system support for KNPP. Environmental Services is responsible for providing and overseeing the Hazardous Chemical Control and Waste Management Plans.

Manager – Substation and Transmission

This position reports to the Vice President Transmission and Engineering and is responsible for substation and transmission activities and the implementation of the quality assurance requirements associated with these functions. The Substation and Transmission Group is responsible for implementing the OQAP, as applicable, whenever their work involves KNPP.

**4. Duties and Responsibilities – Onsite (Figure 3)**

KPB Site Vice President

This position is responsible for all plant activities associated with safe and reliable operation, maintenance, engineering, assessment and technical support. He is also

|   |   |
|---|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by<br/> Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01<br/> Rev. 24-A1-B<br/> Page 7 of 4645</p> |
|---|---|

responsible for the activities of the site business group associated with budgeting, purchasing, strategic planning and information management. The KPB Site Vice President position maintains authority and responsibility for specific NRC correspondence such as 10CFR21 reports, license amendments and written correspondence signed under oath or affirmation in accordance with 10CFR50.54(f). This position has delegated specific authority and responsibilities as described below to the groups shown in Figure 3.

Plant Manager

This position is responsible to the KPB Site Vice President for the safe and reliable operation and maintenance of the plant in accordance with the requirements of the OQAP. This position has the responsibility for the review, approval, and verification of implementation of nuclear administrative directives affecting quality for his areas of responsibility. These areas include maintenance, operations, and planning and scheduling, as described below:

Plant Maintenance – (Electrical/Mechanical/Instrument & Control) - is responsible for maintenance of plant equipment and maintenance engineering activities.

Plant Operations – is responsible for plant operations including general supervision of all shift operating personnel.

Planning and Scheduling – is responsible for plant outage coordination activities, administration of the work request system, and planning and scheduling for routine maintenance activities.

KPB Site-Engineering DirectorManager

Kewaunee Nuclear Power Plant  
Operated by  
Nuclear Management Company, LLC



Date: 07/113/04/01

Rev. 24-A1-B

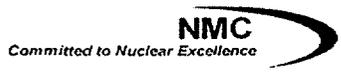
Page 8 of 4645

**Operational Quality Assurance  
Program Description**

This position is responsible for the leadership and supervision of the Engineering and Technical Support group. This position ensures that ~~e responsibilities of this position are centered around providing~~ engineering support is provided to the Kewaunee Nuclear Power Plant. The aspects of this support include, but are not limited to, the evaluation and implementation of physical changes to the plant, engineering evaluations of plant performance, administration and implementation of engineering programs, providing specialized analytical skills as needed to support the plant, providing engineering support on a plant systems basis. This position has the responsibility for review, approval, and verification of implementation of nuclear administrative directives affecting quality for his area of responsibility. These areas are described below:

Physical Change - The physical change process is the method for implementing changes to the plant such as permanent plant modifications/changes, temporary plant modifications/changes, and procurement technical evaluations. -This area is not permanently staffed, but rather, is a process supported by the engineering and technical support staff. Procurement technical evaluations are supported by the Supply Chain area.

Engineering Programs - All program areas are responsible for providing the specialist for that program. The program specialist is responsible for the management of the program, program performance and implementation. Project teams will be created when appropriate by supplementing the program specialists with Engineering & Technical Support staff or other nuclear staff. Responsibilities of the specialist and team include interaction with customers and senior nuclear management, -as necessary. The program team has complete ownership of the program, i.e., responsibility and accountability for successful implementation of the

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01<br/> Rev. 24-A1-B<br/> Page 9 of 4645</p> |
|--|---|

program. Examples of program areas are listed below:

- |                                    |                             |
|------------------------------------|-----------------------------|
| Fire Protection                    | Reactor Engineering Program |
| ISI Program                        | Steam Generator Program     |
| IST/Check Valve Program            | STA Program                 |
| Heat Exchanger Performance Program | Turbine Program             |
| Maintenance Rule Program           |                             |

Engineering and Technical Support (E&TS) Group - The groups are responsible for providing the engineering and technical support for all plant processes, programs and systems. This includes supporting physical change, programs, projects, evaluations, maintenance of the system descriptions, drawings, specifications, procedures, ~~Power Plant Facilities Information System (PPFIS), Material Components System (MCS)~~ plant equipment database, and QA typing documentation. Multi-discipline or multi-department teams are employed to address the engineering needs of the plant, where necessary.

Analytical Engineering - This group is responsible for providing specialized or computer based analysis support to the various groups in the E&TS. Engineering support provided by Analytical Engineering includes Accident Analysis, Probabilistic Risk Assessment, Piping Support and Stress Analysis, Equipment Qualification, Electrical Distribution and Coordination, Set Point Analysis, and Seismic Analysis/SQUG. Personnel assigned to this group are responsible for assuring their tools comply with the QA criteria for safety-related software, programmatic requirements, and commitments associated with their efforts.

KPB Site Services Manager

Kewaunee Nuclear Power Plant  
*Operated by*  
*Nuclear Management Company, LLC*

**Operational Quality Assurance  
Program Description**



Date: 07/11~~3~~04/01

Rev. 24-A1-B

Page 10 of 4645

This position is responsible for plant activities associated with Chemistry, Health Physics, Industrial Safety, and Nuclear Emergency Preparedness. This position has the responsibility for review, approval, and verification of implementation of nuclear administrative directives affecting quality for his area of responsibility. Those areas of responsibility for the Site KPBe Services Manager include:

Plant Radiation Protection – is responsible for radiation protection, plant health physics activities, and the Radiological Environmental Monitoring Program.

Plant Radiochemistry – is responsible for plant chemistry activities.

Industrial Safety – is responsible for site industrial safety activities.

Nuclear Emergency Preparedness - is responsible for the maintenance of an effective emergency preparedness program. Specific responsibilities and duties for the various nuclear emergency preparedness activities are defined in the appropriate directives and implementing procedures.

KPB Business Group Manager

This position is responsible to the KPB Site Vice President for providing general support to the entire Nuclear Department in key business related areas, including administrative support, budgeting and planning, supply chain, development of strategic issues and business plans, project management, information technology, and information management. The areas of budgeting, supply chain, and information technology, receive direction from NMC corporate staff and support from WPSC corporate staff.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01<br/> Rev. 24-A1-B<br/> Page 11 of 4645</p> |
|--|--|

Information Management - is primarily responsible for receipt, maintenance, and overall control of records associated with the Kewaunee Nuclear Power Plant.

Information Technology – is responsible for the general onsite computer support and services.

Supply Chain – is responsible for the onsite procurement process for materials and services, warehousing and storage functions, and material control.

KPB Site Assessment Manager

This position is responsible for the leadership and supervision of the Kewaunee Plant Assessment Group, which includes site Licensing, Corrective Action Program (Kewaunee Assessment Process), Self Assessment / Process Improvement and Operational Experience Assessment activities. Also included are the Maintenance Rule and Human Performance monitoring, and Measurements/Performance Indicators. The areas of Licensing and Self Assessment receive direction and support from NMC corporate staff.

KPB Site Training Manager - Nuclear Training has been delegated the responsibility to develop, maintain, and provide employee training that meets the needs of the Kewaunee Nuclear Power Plant (KNPP). Nuclear Training is responsible for the accredited training programs as described in National Academy of Nuclear Training Document 91-016, The Process for Accreditation of Training in Nuclear Power Industry. Specific responsibilities and duties for the various training activities are defined in the appropriate directives and implementing procedures.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 12 of 4645</p> |
|--|--|

Security Manager – This position is responsible for plant security and fitness for duty programs. Specific responsibilities and duties for the various protective service activities are defined in the appropriate directives and implementing procedures. The Security Manager is responsible to the NMC Director Security.

KPB Manager-Nuclear Oversight Manager

This position is responsible to the Director – Nuclear Oversight for ensuring that an Operational Quality Assurance Program (OQAP) is developed, implemented, and maintained to meet the licensing requirements and management objectives. This position is responsible for final review of changes to the OQAP. This position is responsible for review of directives which control activities affecting quality. The ~~Manager~~-KPB Nuclear Oversight Manager is independent of cost and scheduling considerations and has the authority and organizational freedom to identify quality problems, stop work on non-conforming activities associated with modifications (new construction) until deficiencies have been corrected; initiate, recommend or provide solutions, and verify implementation of corrective actions. The KPB ~~Manager~~-Nuclear Oversight Manager maintains stop work authority for nonconforming activities associated with plant operations by reporting them to the KPB Site Vice President. This position is responsible for ensuring that functions and activities of the Nuclear Oversight (NO) Staff are controlled and performed in accordance with approved directives which implement the requirements of the OQAP. The Nuclear Oversight Staff has the responsibility for verifying the effectiveness of plant quality activities. The Nuclear Oversight Staff is comprised of:

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: center;">Rev. 21-A1-B</p> <p style="text-align: center;">Page 13 of 4645</p> |
|--|--|

Quality Control - Field inspection activities, which includes but is not limited to, material receipt, QC hold points, NDE, and other activities normally associated with traditional quality control.

Quality Assurance - Programmatic reviews and observations to determine program effectiveness and assessments normally associated with quality assurance auditing.

Qualified Suppliers - Review and evaluations of procurement activities, including but not limited to, purchase requisition documents, vendor and manufacturer evaluations.

The Manager-KPB Nuclear Oversight Manager shall as a minimum meet the requirements of ANSI N18.1-1971, and should have a minimum of a B. S. degree in Science or Engineering from an accredited college or university, a minimum of five years experience in power plant construction, engineering and/or plant operation, and a familiarity with codes and regulations.

Joint Offsite Review Committee (JOSRC)

JOSRC is responsible to the NMC President & CEO for review and audit of plant related matters concerning safety. The requirements for personnel, committee composition, meeting frequency, quorum and meeting records shall be as identified below and in accordance with the requirements of the JOSRC Charter. The Committee periodically reviews the results of the Nuclear Oversight Staff audits and is responsible for conducting reviews as part of the Independent Technical Review Program.

1. Function

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>/04/01</p> <p style="text-align: center;">Rev. 21-A1-B</p> <p style="text-align: center;">Page 14 of 4645</p> |
|--|---|

The JOSRC shall function to provide independent review and audit of designated activities in the areas of:

- A. Nuclear Power Plant Operations
- B. Nuclear Engineering
- C. Chemistry and Radio-Chemistry
- D. Metallurgy
- E. Instrumentation
- F. Radiological Safety
- G. Mechanical and Electrical Engineering
- H. Quality Assurance Practices
- I. Other appropriate fields as determined by the Committee, to be associated with the unique characteristics of the nuclear power plant.

2. Composition

The JOSRC shall be composed of, but not necessarily limited to:

- A. At least three technically qualified persons who are not members of the plant staff.
- B. One member from the supervisory staff of the plant.
- C. At least two qualified non-company affiliated technical consultants.
- D. In-house staff management advisors as required.

The Committee membership and its Chairman and Vice Chairman shall be appointed by the NMC President & CEO. Each member of the JOSRC shall have an academic degree in an engineering or physical science field; and in addition, shall have a minimum of five years technical experience, of which a minimum shall be in one or more areas given in paragraph 1., "Function".

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 15 of 4645</p> |
|--|--|

3. Alternates

Alternate members shall be appointed by the JOSRC Chairman, upon approval by the NMC President & CEO, to serve on a temporary basis; however, no more than two alternates shall participate in JOSRC activities at any one time.

4. Consultants

Consultants may be utilized as determined by the Chairman - JOSRC to provide expert advice to the JOSRC.

5. Meeting Frequency

The JOSRC shall meet at least once every six months.

6. Quorum

A quorum of the JOSRC shall consist of the Chairman or Vice Chairman and four members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the plant.

7. Review

The JOSRC shall review:

- A. Safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of 10 CFR 50.59, to verify that such actions did not constitute an unreviewed safety question.
- B. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59.

|  |  |
|--|--|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"><b>NMC</b><br/> <i>Committed to Nuclear Excellence</i></p> <p>Date: 07/11<del>3</del>/04/01</p> <p>Rev. 24-A1-B</p> <p>Page 16 of 4645</p> |
|--|--|

- C. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59.
- D. Proposed changes in Technical Specifications or licenses.
- E. Reports covering violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- F. Reports covering significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- G. Reports covering all Reportable Events.
- H. Reports covering any indication of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems, or components.
- I. Reports and meeting minutes of the PORC.

8. Audits

Audits of plant activities shall be performed under the cognizance of the JOSRC. These audits shall include:

- A. Conformance of plant operation to the provisions contained within the Technical Specifications and applicable license conditions.
- B. Performance, training, and qualifications of the entire plant staff.
- C. Results of all actions taken to correct deficiencies occurring in plant equipment, structures, systems, or method of operation that affect nuclear safety.
- D. Performance of all activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR Part 50.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 17 of 4645</p> |
|--|--|

- E. The Plant Fire Protection Program, implementing procedures and the fire protection and loss prevention program.
- F. Any other area of plant operation considered appropriate by the JOSRC or the NMC President & CEO.
- G. The Radiological Environmental Monitoring Program and the results thereof.
- H. The Off-site Dose Calculation Manual and implementing procedures.
- I. The Process Control Program and implementing procedures for processing and packaging of radioactive wastes.

9. Authority

The JOSRC shall report to the NMC President & CEO and shall advise the President & CEO on those areas of responsibility specified in paragraph 7, "Review" and paragraph 8, "Audits".

10. Records

Records of JOSRC activities shall be prepared, approved and distributed as follows:

- A. Minutes of each JOSRC meeting forwarded to the NMC President & CEO within 14 days following each meeting.
- B. Reports of reviews required by paragraphs 7.E through 7.H, forwarded to the NMC President & CEO within 14 days following completion of the review.
- C. Reports of audits performed by JOSRC shall be forwarded to the NMC President & CEO and to the management positions responsible for the areas audited within 30 days after completion of the audit.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by<br/>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p style="text-align: right;"><br/>Date: 07/113/04/01<br/>Rev. 24-A1-B<br/>Page 18 of 4646</p> |
|--|---|

Plant Operations Review Committee (PORC)

PORC is responsible to the Plant Manager for providing advice on matters relating to nuclear safety at the plant. The requirements for personnel, committee composition, meeting frequency, quorum and meeting records shall be as identified below and the PORC Charter. PORC is also responsible for conducting reviews as part of the Independent Technical Review Program.

1. Function

The PORC shall function to advise the Plant Manager on matters related to nuclear safety.

2. Composition

The PORC shall be composed of key supervisors of the on-site staff from the following disciplines: Operations, Maintenance, Instrument and Control, Reactor Engineering, Quality, and Radiological.

3. Alternates

Alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than two alternates for required members shall participate in PORC meetings at any one time.

4. Meeting Frequency

The PORC shall meet at least once per calendar month and as convened by the Chairman.

5. Quorum

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 19 of 4645</p> |
|--|--|

A quorum of the PORC shall consist of the chairman (or his designated alternate) and a majority of the required members including temporary alternates.

6. Responsibilities

The PORC shall be responsible for:

- A. Review of operating, maintenance and other procedures including emergency operating procedures which affect nuclear safety as determined by the Plant Manager. Changes to those procedures are made in accordance with the provisions of TS 6.8.
- B. Review of all proposed tests and experiments that affect nuclear safety.
- C. Review of all proposed changes to the Technical Specifications.
- D. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- E. Review of all proposed changes to the Security Plan, Fire Plan, and their respective implementing procedures.
- F. Review all reports covering the investigation of all violations of the Technical Specifications and the recommendations to prevent recurrence.
- G. Review plant operations to detect potential safety hazards.
- H. Performance of special reviews and investigations and prepare reports thereon as requested by the Chairman of Joint Offsite Review Committee.
- I. Review of all Reportable Events.
- J. Review of changes to the Process Control Program the Off-Site Dose Calculation Manual, and the Radiological Environmental Monitoring Manual.

|  |   |
|--|---|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"><b>NMC</b><br/> <i>Committed to Nuclear Excellence</i></p> <p>Date: 07/113/04/01</p> <p>Rev. 21-A1-B</p> <p>Page 20 of 4645</p> |
|--|---|

7. Authority

The PORC shall:

- A. Recommend to the Plant Manager approval or disapproval of items considered under preceding paragraphs 6.A through 6.E.
- B. Make determinations with regard to whether or not each item considered under paragraph 6 constitutes an unreviewed safety question.
- C. Provide immediate notification in the form of draft meeting minutes to the Site Vice President and the Chairman - Joint Offsite Review Committee of disagreement between the PORC and the Plant Manager. The Plant Manager shall have responsibility for resolution of such disagreements.

8. Records

Minutes shall be kept of all meetings of the PORC and copies shall be sent to the KPB Site Vice President and the Chairman - Joint Offsite Review Committee.

QUALITY ASSURANCE TYPING COMMITTEE

This Committee is responsible to the ~~Site~~ KPB Engineering Manager ~~Director~~ for changes to classification of systems, structures and components within the nuclear power plant according to the importance of the function they serve with respect to plant safety and operability. The description of the committee's duties and authority shall be established in various directives and the QA Typing Committee Charter.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01</p> <p style="text-align: center;">Rev. 21-A1-B</p> <p style="text-align: center;">Page 21 of 4645</p> |
|--|--|

## 2.0 QUALITY ASSURANCE PROGRAM

### 1. General

The Operational Quality Assurance Program complies with the requirements of 10CFR50, Appendix B, the provisions of ANSI N18.7-1976 and the Regulatory Guides which endorse the daughter standards required by ANSI N18.7-1976 with the exceptions, interpretations, and qualifications noted in Appendix A of this description. The requirements of the OQAP apply to those activities which affect the quality of structures, systems or components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. All structures, systems, and components are classified as QA Type 1, 2, 3 or N according to their function and importance in relation to the safe operation of the reactor, with emphasis on the degree of integrity required to protect the public. The OQAP requirements are mandatory for all QA Type 1 items. QA Type 2 and 3 items, as determined by management, may require special control and an "X" modifier may be added to the QA2 or QA3 type designation. All components and/or systems which are identified as Safety Class I in the Updated Safety Analysis Report (USAR) shall be categorized as QA Type 1. All nuclear fuel and core components shall be categorized as QA Type 1. The definitions and a list of the Safety Class I, II and III structures, systems and components are found in the Kewaunee USAR Appendix B, Table B.2-1.

During construction, QA types were established for plant equipment by a QA typing committee. The QA types for equipment subsequently added to the plant are established by the Responsible Engineer who installs the equipment under the Plant Physical Change program. The Plant Physical Change program exists under

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 22 of 4645</p> |
|--|--|

the requirements of the OQAP. Therefore, the QA types of equipment added since construction are controlled under the OQAP and its definitions. A change to an established QA type must be approved by the QA Typing Committee.

**2. Requirements**

It is mandatory for applicable employees to comply with the OQAP. It is the responsibility of the management charged with the implementation of the program to inform personnel working for them that the quality policies, OQAP manual, and procedures have mandatory requirements which must be implemented and enforced. The KPB Site-Training Manager is responsible for conducting training sessions as necessary to keep individuals informed of policies and changes to the OQAP. The lesson plans for these training sessions will be prepared under the cognizance of the Nuclear Oversight Staff.

The OQAP shall be applied to all activities affecting safety-related functions and include: physical changes, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, modifying, engineering, and training. The control over these activities shall be applied to an extent consistent with their importance to safety and shall take into account the need for special controls, processes, tests, equipment, tools, and skills to attain the required quality, and the need for verification of quality by inspection, evaluation, or test.

**3. Structure**

The OQAP manual is the top level quality program document for operational phase activities. The OQAP is a manual which incorporates the requirements of 10CFR50 Appendix B, the provisions of ANSI N18.7-1976 and ANSI N45.2.23-1978 and

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01<br/> Rev. 24-A1-B<br/> Page 23 of 4645</p> |
|--|--|

Regulatory Guides 1.8-Rev. 1, 1.30, 1.37, 1.38-Rev. 2, 1.39-Rev. 1, 1.54, 1.58-August, 1973, 1.64-Rev. 2, 1.74, 1.88-Rev. 2 and 1.94. The requirements and responsibilities identified by the manual are implemented through directives, procedures, and instructions which prescribe activities affecting quality. Technical reviews of directives are provided by department heads or process owners. Review of Nuclear Administrative Directives, and Fuel Management Directives for consistency with the OQAP is provided for by the ~~Manager~~-KPB Nuclear Oversight Manager.

Nuclear administrative directives are reviewed and approved by the appropriate responsible Director/Manager. These directives are prepared to govern activities affecting quality, such as physical changes, procurement, licensing, training, document control, operation, procedure control, material control, maintenance, and other related activities.

Fuel Management Directives are reviewed and approved by the Project Manager — ~~Nuclear Fuel Commodities~~-Kewaunee/Point Beach and are prepared to govern fuel management activities affecting quality, such as fuel procurement, reactor core performance and analysis, core design, and other related activities.

**4. Management Review**

Management above or outside the Nuclear Oversight organization shall routinely be informed of the status and adequacy of the OQAP. Audits of implementing directives shall be conducted to verify conformance to the program. Nonconformances or differences of opinion which cannot be settled between Nuclear Oversight and the department involved shall be brought to the attention of upper management for resolution.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: center;">Rev. 21-A1-B</p> <p style="text-align: center;">Page 24 of 4645</p> |
|--|--|

**5. Indoctrination and Training**

A training program shall be established in order to provide for developing and maintaining a staff qualified to operate, maintain and provide the necessary technical support. The indoctrination and training program shall provide for:

- A. Training personnel responsible for performing quality-affecting activities as to the purpose, scope and implementation of the quality-related manuals, instructions, and procedures.
- B. Establishing the scope and depth of indoctrination and training to be provided commensurate with the level of quality-affecting activities being performed by an individual.
- C. Training personnel who perform quality-affecting activities in the principles and techniques of the activity being performed.
- D. Training and retraining on an as-needed basis to maintain a level of quality commensurate with the quality-affecting activity being performed.
- E. Maintaining records of training sessions, attendance and content of the training session.

**3.0 DESIGN CONTROL**

Modifications to systems that are nuclear safety related, or as described in the USAR, and considered significant for nuclear safety shall be controlled by a Plant Physical Change Program established by directives to ensure compliance with the existing design and the requirements of 10CFR50.59. Directives shall be prepared to augment the following aspects of the Plant Physical Change Program:

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01</p> <p style="text-align: center;">Rev. 21-A1-B</p> <p style="text-align: center;">Page 25 of 4645</p> |
|--|--|

1. Establish the structure, authority and responsibilities of the groups or positions involved in design change activities.
2. Correctly translate design inputs into specifications, drawings, procedures, or instructions.
3. Identify and select the appropriate quality standards in design documents.
4. Select and review the suitability of materials, parts, equipment and processes essential to the safety-related functions of the structure, system, or component.
5. Assure that computer software, which is an integral part of the operation of equipment, is designed, documented and tested adequately.
6. Assure the change is subject to at least the same measures applied to the original design, and provide for a second level review.
7. Assign the responsibilities of all organizations involved in the Plant Physical Change process, both internal (KNPP) and external (contractor, vendor) and ensure a method of exchanging technical information across internal and external interfaces.

PORC shall be responsible for reviewing proposed changes or modifications that affect nuclear safety. JOSRC shall review the safety evaluation of changes completed under the provision of 10CFR50.59 to verify that such actions do not constitute an unreviewed safety question.

#### **4.0 PROCUREMENT DOCUMENT CONTROL**

Measures shall be established in directives to provide for the preparation of procurement documents to ensure that applicable regulations, design bases, and

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01<br/> Rev. 24-A1-B<br/> Page 26 of 4645</p> |
|--|--|

other QA program requirements are included or referenced. Procurement documents shall include, as appropriate: the scope of work; technical requirements; documentation requirements; requirements for hold and witness points; the allowance for access to supplier's facilities for review or audit of documentation or manufacturing procedures; and requirements that the supplier has a documented QA program in accordance with 10CFR50, Appendix B which includes a means for disposition of nonconformances.

The directives shall include measures to ensure that procurement documents are reviewed and approved by qualified and authorized personnel prior to release. The directives shall also provide assurance that the procurement document review includes a verification that quality requirements are stated in such a manner, that through either source surveillance and inspecting, supplier audits, or receipt inspection, the quality of the procured items may be verified.

**5.0 INSTRUCTIONS, PROCEDURES, AND DRAWINGS**

Measures shall be established in appropriate directives to control the preparation, format, content, and use of operating, test and maintenance procedures, and approvals for same. When required, they shall be prepared in sufficient detail to provide adequate guidance in performing activities affecting quality. These procedures shall include, as appropriate, initial conditions, step-by-step instructions, sign-off steps, acceptance criteria, etc., to ensure that activities affecting quality have been satisfactorily completed.

A Plant Physical Change Program shall be established by directives to assure that instructions, procedures, and drawings are used, where appropriate, to control

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: right;">Rev. 24-A1-B</p> <p style="text-align: right;">Page 27 of 4645</p> |
|--|---|

activities associated with the modification of safety systems described in the USAR. These directives shall establish a method to update drawings, procedures, and other technical documents associated with the plant modification.

## 6.0 DOCUMENT CONTROL

The generation, distribution, and revisions of documents that establish specifications or activities affecting quality shall be controlled by formal directives. These directives shall provide for the following document control measures:

1. Identification of individuals or organizations responsible for preparing, reviewing, approving, and issuing documents and revisions, thereto.
2. Identifying and providing the proper documents to be used in performing safety-related activities.
3. Establishing distribution.
4. Establishing a method of providing up-to-date documents to the controlled files.

## 7.0 CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES

Suppliers of material, equipment and services, including suppliers of spare or replacement parts, shall be selected based on an evaluation of the supplier's capability to provide the purchased items or services in accordance with the requirements of the procurement documents. Directives shall include methods for source evaluation and selection. One or more of the following considerations shall

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 28 of 4645</p> |
|--|--|

be included for source evaluation: evaluation of the supplier's history of providing a product which performs satisfactorily in actual use; review of industry directories; review of whether the prospective supplier has a quality assurance program reviewed and inspected by the NRC under the Vendor Inspection Program; review of whether the prospective supplier has been recently audited by NUPIC (Nuclear Utilities Procurement Issues Committee) or similar third party inspection publication; review and evaluation of the supplier's Quality Assurance Program, Manual and Procedures, and the supplier's design and manufacturing capability; and a NMC survey of the prospective supplier's technical and quality capability by directly evaluating his facilities, personnel and the implementation of his quality assurance program.

A Qualified Suppliers System shall be established and maintained by directives developed under criteria imposed by the Operational Quality Assurance Program.

Material, equipment, or services purchased from suppliers not on the Qualified Suppliers System shall undergo a review and evaluation to ensure conformance to the acceptable criteria established by the Quality Assurance Program. Directives shall also establish control measures to ensure that documentary evidence of the conformance of material and equipment to procurement requirements is available prior to installation or use.

## **8.0 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS**

Controls established for procurement shall ensure that safety- related materials, parts, and components are purchased under the requirements and documentation established by the Operational Quality Assurance Program. Implementing

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 29 of 4645</p> |
|--|--|

directives shall provide for a documented receipt and inspection of incoming material and equipment, along with providing a system for identifying the status of acceptable items to ensure use and installation of only correct and acceptable materials. Identification and traceability of safety-related materials, parts, or components from issuance to installation within the plant shall be provided by this system.

**9.0 CONTROL OF SPECIAL PROCESSES**

Special processes including welding and non-destructive examination shall be accomplished under controlled conditions by qualified personnel, in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

The Operational Quality Assurance Program is established to ensure compliance and implementation of these requirements.

**10.0 INSPECTION**

Concerning material receipt, directives shall establish a receipt inspection under the control of the ~~Manager~~-KPB Nuclear Oversight Manager, which provides for visual examination, receipt of required documentation, verification of identification, and on-site technical inspection.

Concerning modifications, the Plant Physical Change Program provides for the following requirements: special processes, test, measuring and test equipment, and cleanliness. The work package shall be reviewed by site Nuclear Oversight personnel who have been appropriately trained to ensure that the required special installation procedures are included in the package or properly referenced.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>/04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 30 of 4645</p> |
|--|---|

Verification of conformance to established requirements shall be performed by individuals or groups who do not have direct responsibility for performing the work being verified. Personnel or groups assigned responsibility for verification of inspection or testing shall be delineated in appropriate procedures and directives.

Plant personnel performing inspection, examination, and testing functions which are associated with normal operations of the plant and certain technical reviews normally assigned to the on-site operations organization shall be qualified to ANSI N18.1-1971.

Plant personnel who will be performing inspection, examination, and testing functions which are not associated with normal operations of the plant shall be trained and qualified in accordance with the requirements of Regulatory Guide 1.58, "Qualification of Nuclear Power Plant Inspection, Examination and Testing Personnel", and 10CFR50.55a, Subsection g, "Inservice Inspection Requirements", which endorse, with specific exceptions, ANSI N45.2.6-1973, "Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants", except that QA experience cited for levels I, II, and III shall be interpreted to mean actual experience in carrying out the type of activity being performed. Nuclear Oversight personnel will be qualified to these references with the noted exceptions. Non-plant personnel who perform plant inspections, examinations and testing shall be trained and qualified in accordance with the above stated paragraph.

Additionally, this also applies to contract personnel working under the site OQAP. Suitable review and acceptance must be made for qualification to other revisions or other standards the contractor's program may specify. Training of personnel

|  |  |
|--|--|
| <p>Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/> Program Description</b></p> | <p style="text-align: right;"> <br/> Date: 07/11<del>3</del>/04/01<br/> Rev. 24-A1-B<br/> Page 31 of 4645</p> |
|--|--|

performing activities affecting quality shall be conducted to ensure that suitable proficiency is achieved and maintained.

**11.0 TEST CONTROL**

A preoperational test program was conducted to demonstrate that structures, systems, and components would perform up to quality standards. A continuing operational test program is being conducted in accordance with Technical Specification surveillance requirements to ensure the operability of safeguard and safety-related structures, systems, and components. Plant directives and procedures shall provide for the prerequisites, evaluation, and documentation of these test results.

When required, the Work Request and Plant Physical Change Program shall provide for the testing and evaluation of test results for replacement, repaired, or modified structures, systems, or components.

**12.0 CONTROL OF MEASURING AND TEST EQUIPMENT**

Measuring and test equipment and reference standards (calibration standards) used for measurements, tests and calibration respectively, shall be of the proper range and type and shall be controlled, calibrated and adjusted, and maintained at specified intervals or prior to use to assure the necessary accuracy of calibrated devices. The referenced standards used shall have an accuracy range and stability which are adequate to verify that the equipment being calibrated is within required

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/113/04/01<br/> Rev. 24-A1-B<br/> Page 32 of 4645</p> |
|--|--|

tolerance. The reference standards used shall be adequate for the requirements of the equipment being calibrated, shall be recertified against higher level equipment of closer tolerance, and shall be traceable to nationally recognized standards. The method and interval of calibration for measuring and test equipment and reference standards shall be specified and shall be based on the type of equipment, its characteristics and other conditions affecting calibration. When measuring and testing equipment or reference standards are found to be out of calibration, an evaluation shall be made of previous inspections and test results and acceptability of the items previously inspected.

**13.0 HANDLING, STORAGE, AND SHIPPING**

Nuclear administrative directives shall provide a system for material and equipment handled at and shipped from the plant to prevent damage, deterioration or loss. Where necessary, for sensitive or high value items, specific written instructions or procedures will be utilized. Where necessary, special handling tools and equipment will be utilized.

Directives shall provide for special provisions for the control of items which might cause risk to the general public if damage should occur.

Directives shall also provide a system for controlling material during storage to prevent damage, loss, deterioration, or environmental damage. Housekeeping practices shall be controlled to prevent degradation in item quality.

**14.0 INSPECTION, TEST, AND OPERATING STATUS**

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>/04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 33 of 4645</p> |
|--|---|

The measures required in this criteria are applied to two general categories, material control and operational control. Inspection, test, and operating status provided by the material control program is implemented through plant directives which are controlled by the Nuclear Oversight organization. Operational control, including the status of inspections, tests, and operations activities is described in plant directives which are controlled by the Operations and Planning and Scheduling organizations. All changes in procedures for these categories are reviewed by management. If the need for bypassing of a required inspection, test, or other critical operation occurs, it shall be procedurally controlled and reviewed by management.

1. Material Control

A receipt inspection at the plant site shall identify the status of acceptable items and shall provide for the control of uninspected and nonconforming items to ensure use and installation of only correct and acceptable materials.

Physical identification shall be used to the maximum extent possible to identify the status of materials inspected. The system shall provide for

documentation traceable to the item and segregation and disposition of nonconforming items to preclude misuse.

2. Operational Control

The work control program shall include provisions for taking equipment out of service, identification of that equipment, and precautions or prerequisites for returning that equipment to service. The work request and supplemental documents shall be reviewed by Nuclear Oversight personnel to ensure that special processes, inspection (hold and witness points) and testing

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <b>Nuclear Management Company, LLC</b></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/113/04/01</p> <p style="text-align: right;">Rev. 24-A1-B</p> <p style="text-align: right;">Page 34 of 4645</p> |
|--|---|

requirements are adequately specified. They are also reviewed by operations personnel to determine the effect on plant operations, the proper tagging out of service of equipment, and the protection of personnel and equipment.

**15.0 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS**

When a nonconforming item is identified during a receipt inspection, the condition shall be documented on a Material Nonconformance Report and the item identified or segregated to preclude misuse, further processing, or installation pending disposition. Material Nonconformance Reports will be controlled and evaluated by cognizant plant personnel for the determination of the disposition of nonconforming items. Material Nonconformance Reports and dispositions shall be submitted to the responsible organization for implementation of corrective action. Provisions shall be established to ensure that items dispositioned as "repair" or "rework" shall be reinspected and require documentation verifying the acceptability of the item prior to release for use.

**16.0 CORRECTIVE ACTION**

Conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective materials and equipment (post-receipt inspection), and nonconformances shall be documented and reported in accordance with approved procedures. These reports provide the mechanism for all personnel to notify management of conditions adverse to quality. Measures shall be provided for the prompt processing of these reports to ensure expeditious investigation, evaluation,

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01<br/> Rev. 24-A1-B<br/> Page 35 of 4645</p> |
|--|--|

and implementation of corrective action. For situations determined to be significantly adverse to quality, investigations shall not only provide for identifying and correcting the condition, but also for determining the cause of the condition to ensure that corrective action is taken to preclude its recurrence.

Measures shall be established to ensure that reports of conditions adverse to quality are promptly prepared and reviewed for events which may be potentially reportable to the NRC. These reports shall be evaluated by management for safety implications and Technical Specifications violations. The system shall provide for determination of corrective action to be taken, implementation of the corrective action, and final close out.

Measures shall be established in appropriate directives and Quality Procedures to document and control audit findings. These measures shall include a description of the unacceptable condition, corrective action to be taken, response time, verification of implementation of appropriate corrective action, and close out of the deficiency generated as a result of audits. These findings shall be documented in accordance with approved procedures. Corrective action taken for audit findings shall be reviewed and verified. Disagreement between Nuclear Oversight and the audited organization regarding corrective action shall be pursued through responsible management with the final authority resting with the Site Vice President.

Technical deficiencies and recommendations generated during technical reviews shall be documented with the report. Technical deficiencies and recommendations shall be submitted to the appropriate Manager for disposition as deemed necessary.

## **17.0 QUALITY ASSURANCE RECORDS**

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 36 of 4645</p> |
|--|--|

Directives shall be prepared to control records that are generated during the operation of the Kewaunee Nuclear Power Plant. These directives shall identify the types of records that are to be controlled including requirements for storage.

Records shall be primarily maintained in the KNPP QA Vault, the main records storage facility. Frequently used records, not stored in the KNPP QA Vault shall be maintained in accordance with procedures which provide for proper control and protection of the records. Records may be maintained using microfilm, optical disk, or other approved technology provided appropriate quality control provisions have been established in the controlling procedures.

Records shall be kept for the prescribed periods of time in accordance with the requirements of Technical Specifications or Regulations. Directives shall provide for a system that permits the retrieval of information in a reasonable amount of time.

## 18.0 **AUDITS**

Audits shall be conducted in accordance with appropriate directives, procedures, or instructions to verify that the requirements of the QA program are being implemented. Audits shall be conducted on, but not limited to, power plant operating and maintenance activities, engineering staff activities, Fuel Management activities, Purchasing Department activities, and Supplier activities. A comprehensive system of planned and documented audits shall be carried out to

|   |  |
|---|--|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by</i><br/><i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p><br/>Date: 07/11<del>3</del>04/01<br/>Rev. 24-A1-B<br/>Page 37 of 4645</p> |
|---|--|

verify compliance with all aspects of the administrative controls and quality assurance program. Audits of selected aspects of operational phase activities shall be performed with a frequency commensurate with their safety significance and in such a manner as to assure that an audit of all safety-related functions is completed within a period of two years. A quality assurance program has been developed to cover the auditable portions of the Technical Specifications over a five year interval.<sup>1, 2</sup> Audits shall be performed by experienced personnel trained, in accordance with ANSI N45.2.23-1978, and independent of any direct responsibility of the activity being audited.

Preparation of procedures for audits, documentation of audit findings, and issuance of audit reports shall be described by applicable directives or procedures. Supervisory personnel of the audited activity shall review the audit report and provide corrective actions. Follow-up action shall be provided for by the OQAP to ensure that corrective action is implemented and adequate.

<sup>1</sup> Letter from C. W. Giesler (WPSC) to J. F. Streeter (NRC) dated August 22, 1983.

<sup>2</sup> Letter from R. L. Spessard (NRC) to C. W. Giesler (WPSC) dated September 30, 1983.

|  |  |
|--|--|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 38 of 4645</p> |
|--|--|

**APPENDIX A**

**ANSI N18.7-1976 EXCEPTIONS, INTERPRETATIONS, QUALIFICATIONS**

**General**

ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants" is adopted to provide a basis for establishing an operational quality assurance program that meets the requirements of 10CFR50 Appendix B. This standard provides an acceptable means to satisfy the criteria of 10CFR50 Appendix B, but does not limit the use of alternate means to ensure safe operation of the plant. In this regard, those portions of this standard to which exceptions, interpretations and/or qualifications are taken are listed below.

Standards in general present objectives to be met with the method of implementation left general enough to provide for various interpretations for implementation. In the review of the program in accordance with the adoption of these new standards, many changes in implementation have been made. Where questions of interpretation were raised a conscientious interpretation has been formalized with the Nuclear Oversight staff. Wherever future questions of interpretation arise they will be decided in a similar manner with continued disagreement being brought before corporate management for resolution.

When a short term or one time contradiction to the program is discovered, a non-conformance action will be taken within the Nuclear Oversight organization to ensure a conscientious effort to maintain a quality level equivalent to the safety significance of the activity involved. When a long term or permanent contradiction to the program exists, a program change shall be implemented providing the same level of review as the adoption of this program, and the change will be submitted to the NRC.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: center;">Date: 07/11<del>3</del>/04/01</p> <p style="text-align: center;">Rev. 24-A1-B</p> <p style="text-align: center;">Page 39 of 4645</p> |
|--|---|

Finally, wherever Technical Specifications overlap or contend with the administrative controls provided for in this program, the Technical Specifications will take precedence.

**PARTICULAR EXCEPTIONS AND QUALIFICATIONS**

**ANSI N18.7-1976**

**Section**

3.1 Administrative controls shall be established necessary to comply with this standard as adopted, with the exceptions, interpretations, and qualifications addressed in this transmittal.

5.2.7.2 This paragraph requires that design activities associated with modification of safety-related structures, systems, and components shall be accomplished in accordance with ANSI N45.2.11-1974. We will commit to apply this standard to those design activities which we deem are comparable in nature and extent to similar construction related activities, the provisions of which shall be employed as applicable to the degree of importance to safety for the design project under consideration. We shall also adopt the Regulatory Position of Regulatory Guide 1.64, Rev. 2, June 1976, as requested with an exception to position C.2. We will follow our existing practice that design verification should not be performed by the originator's supervisor, except where expertise is not available other than the supervisor immediately responsible for the design.

5.2.9 This section requires that procedures be developed to supplement features and physical barriers designed to control access to the plant and, as appropriate, to vital areas within the plant. Plant security and visitor control measures are implemented in accordance with the Kewaunee Security Manual, required by 10 CFR 50.34(c).

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/113/04/01</p> <p style="text-align: right;">Rev. 24-A1-B</p> <p style="text-align: right;">Page 40 of 4645</p> |
|--|---|

**5.2.12** This section specifies that ANSI N45.2.9-1974, "Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants", shall be used for management of plant records during the operational phase. Compliance with the provisions of this standard and the Regulatory Position of Regulatory Guide 1.88, Rev. 2, October 1976, shall be deemed applicable to the nature and scope of the work being performed and the importance of the item or service involved with the exceptions noted below.

**5.2.15** This section requires that plant procedures which govern safety-related activities shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. KNPP has alternate programs in place that make a biennial review process unnecessarily duplicative. These alternate programs ensure procedures are periodically reviewed and maintained current when pertinent source material is revised, plant physical changes are made, and/or any deficiencies occur. KNPP will also implement measures specifying that infrequently scheduled plant procedures that have not been used or reviewed for two years should be reviewed before use. Due to the significance of the Integrated Plant Emergency Operating Procedures (IPEOP's), the biennial review of the IPEOP's will be continued. Alternate programs in place include the following:

1. Technical Specification revision process

This process includes a review of affected plant procedures upon the approval of a Technical Specification Amendment and subsequent revisions as appropriate.

|   |  |
|---|--|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by</i><br/><i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p style="text-align: right;"><br/>Date: 07/11<del>3</del>/04/01<br/>Rev. 21-A1-B<br/>Page 41 of 4645</p> |
|---|--|

2. Physical Change Program

Nuclear department heads are notified of modifications and are requested to review affected plant procedures. Revisions to procedures are verified as part of the Physical Change closeout process.

3. Various Self-Assessment Programs

During self-assessment activities, procedures may be identified that contain significant discrepancies. Revisions are made as appropriate.

4. Kewaunee Assessment Process (KAP)

Any procedures identified as being in need of revision during the KAP evaluation process are revised before the KAP corrective action is closed out.

5. Quality Assurance Program

At least every two years, a surveillance will be performed whereby randomly selected safety-related procedures would be checked for added assurance of timely revision of procedures.

6. Operating Experience Assessment Program

During operating experience assessment activities, procedures may be identified that contain significant discrepancies or require change. Revisions are made as appropriate. Significant changes to vendor manuals are evaluated as part of this program.

|  |   |
|--|---|
| <p style="text-align: center;">Kewaunee Nuclear Power Plant<br/> <i>Operated by</i><br/> <i>Nuclear Management Company, LLC</i></p> <p style="text-align: center;"><b>Operational Quality Assurance<br/> Program Description</b></p> | <div style="text-align: right;">  </div> <p style="text-align: right;">Date: 07/11<del>3</del>04/01</p> <p style="text-align: right;">Rev. 24-A1-B</p> <p style="text-align: right;">Page 42 of 4645</p> |
|--|---|

**ANSI N45.2.9-1974**

**Section**

**4.3 & 4.4 Concerning Receipt Control.**

The Records Management Group has been designated as the group responsible for receiving and storing records. This staff does not control which records are sent to them, however, there is a record index system identifying which records are under the control of the QA Program. We have assigned responsibility for assuring QA records are retained in the KNPP QA Vault to the various department heads or process owners. Also there is no log of incoming records. However, the previously-mentioned index is kept up to date and serves as a list of records received and retained. We have a procedure which partially covers the receipt control of records but none specifically for this action. We do not plan at this time to implement any further controls on the receipt of records.

**ANSI N45.2.9-1974**

**Section**

**5.6 Concerning Permanent and Temporary Storage Facilities.**

Criteria specified in this paragraph for those records stored in the KNPP QA Vault are met; however, the use of temporary storage facilities, the definition of a working QA document and the transport of QA records to the vault differ.

Several in-house generated QA documents/records are maintained in working files, e.g., JOSRC Meeting Minutes, training records and radiological survey data. These documents/records which we feel are working documents until no longer used on a routine basis are kept in locked, fire-proof file cabinets and are periodically transferred to the

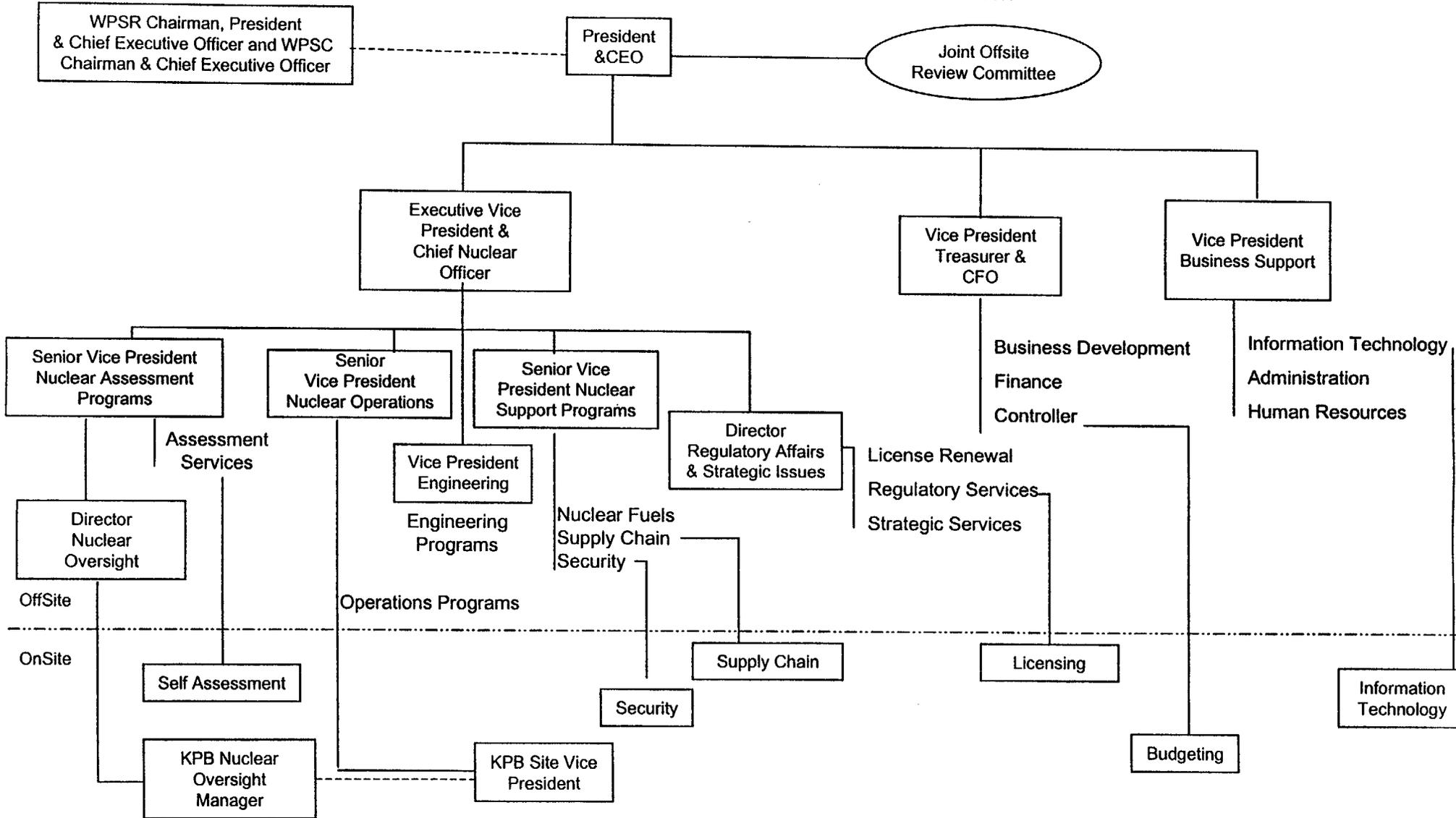
|   |  |
|---|--|
| <p>Kewaunee Nuclear Power Plant<br/><i>Operated by</i><br/><i>Nuclear Management Company, LLC</i></p> <p><b>Operational Quality Assurance<br/>Program Description</b></p> | <p><br/>Date: 07/113/04/01<br/>Rev. 24-A1-B<br/>Page 43 of 4645</p> |
|---|--|

KNPP QA Vault. Duplication or filing in the vault would be unacceptable due to the quantity and frequent use of these documents.

We find our handling of these documents acceptable due to the relative short duration of filing in temporary quarters and relative insensitivity of these documents to the safety of the plant. Finally, we do not have a courier service to immediately transfer a QA record just completed to the vault. Some records are transferred by personal delivery and others through the routine in-company mail service. At this time we do not plan to implement any further controls on transferring documents to the KNPP QA Vault.

Figure 1

NMC OFFSITE FUNCTIONAL QUALITY ASSURANCE ORGANIZATION

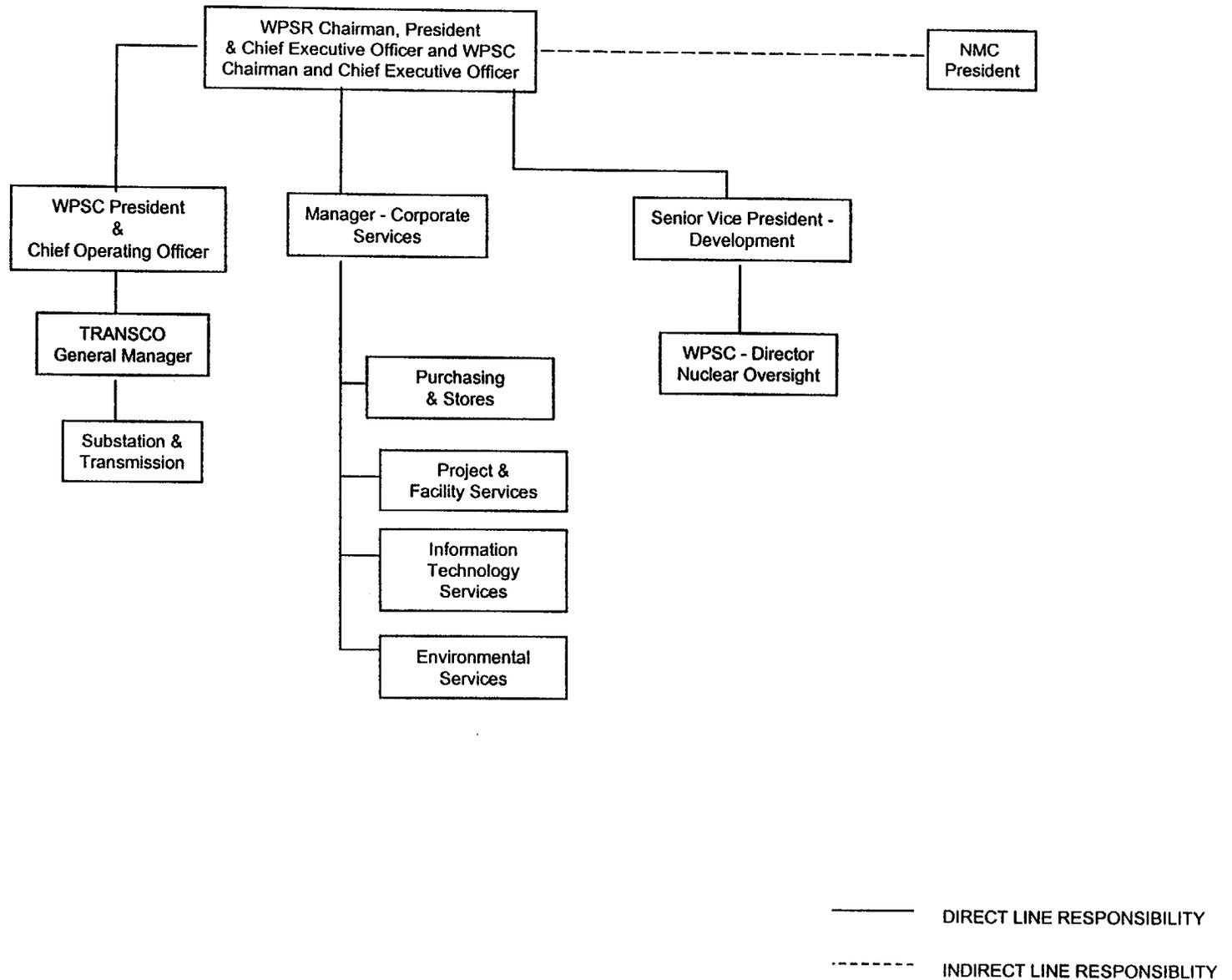


———— DIRECT LINE RESPONSIBILITY

- - - - - INDIRECT LINE RESPONSIBILITY

FIGURE 2

WPSC OFFSITE FUNCTIONAL QUALITY ASSURANCE ORGANIZATION



ONSITE FUNCTIONAL QUALITY ASSURANCE ORGANIZATION

