

NORTH I N STATES POWER COMF JY

Mr D L Ziemann  
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June 17, 1976

process, to summarize substantive changes to the Operational QA plan in the Annual Operating Report to the NRC, and to make the copies of the current revision of the Operational QA Plan available to the I&E Inspectors for their review in the Operational Quality Assurance section at the NSP General Office.

The Operational Quality Assurance Plan, and the directives, procedures and instructions issued thereunder, will provide compliance with the following Regulatory Guides:

<u>Guides</u>	<u>Rev.</u>	<u>Date</u>
1.8	1	September, 1975
1.30	-	August 11, 1972
1.37	-	March 16, 1973
1.38	-	March 16, 1973
1.39	-	March 16, 1973
1.54	-	June, 1973
1.58	-	August, 1973
1.64	1	February 19, 1975
1.74	-	February, 1974
1.88	1	December, 1975
1.94	1	April, 1976

While we believe that the Operational Quality Assurance Plan will meet the intent of the draft copy of ANSI N18.7, Rev. 1, which was attached to your March 2, 1976 letter, we deem it inappropriate to make a commitment based on the content of an ANSI Standard which has not been issued.

Yours very truly,

*L. O. Mayer*

L O Mayer, PE  
Manager of Nuclear Support Services

LOM/ak

cc: J G Keppler  
G Charnoff  
MPCA  
Attn: J W Ferman

Attachment

Operational Quality Assurance Plan  
Rev: 0

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## 1.0 Policy Statement

Northern States Power Company (NSP) has established and is implementing an Operational Quality Assurance Program. This quality assurance program is applicable to NSP nuclear plants that are regulated under provisions of an NRC Operating License.

The quality assurance program, as applied to activities affecting safety related functions, shall comply with and be responsive to applicable regulatory requirements and applicable industry codes and standards including:

1. 10CFR50, Appendix B "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants",
2. NRC Operating Licenses.
3. The ASME Boiler and Pressure Vessel Code, Section XI, "Inservice Inspection".

Management directives and departmental instructions and procedures shall provide for compliance with appropriate regulatory, statutory, license and industry requirements. Specific quality assurance requirements and organizational responsibilities for implementation of these requirements shall be specified in implementing directives and instructions.

Compliance with this policy and the provisions of the Operational Quality Assurance Program is mandatory for NSP personnel with respect to nuclear plant operational activities or activities which support nuclear plant operation. Personnel shall therefore, be familiar with the requirements and responsibilities of the program that are applicable to their individual activities and interfaces.

The Executive Vice President, through an independent organization, shall periodically have the Operational Quality Assurance Program reviewed to assure its adequacy.

## 2.0 Introduction

Northern States Power Company (NSP) is involved in the construction and operation of nuclear and fossil fueled power plants. Construction of nuclear plants is conducted under a Quality Assurance Program on a project basis. NSP's nuclear plant operational activities are conducted under the Operational Quality Assurance Program.

The Construction Quality Assurance Program is structured to govern nuclear plant design, fabrication, construction, testing and associated procurement as required by the applicable NRC Construction Permit and pertinent regulations. The Operational Quality Assurance Program is formulated on a Company wide basis, to govern nuclear plant operational activities and

associated support activities as required by NRC Operating License provisions and associated regulations. The Operational Quality Assurance Program is implemented, to the extent compatible with construction responsibilities, at least 90 days prior to initial fuel loading and is fully implemented at the time of commercial operation of the plant.

### 3.0 Organization

#### 3.1 General Requirements

NSP shall be responsible for the establishment and execution of the Operational Quality Assurance Program. NSP may delegate to other organizations the work of establishing and executing the Operational Quality Assurance Program, or any part thereof, but shall retain responsibility therefor.

The authority and duties of persons and organizations performing quality assurance functions shall be clearly established and delineated in writing. Such persons and organizations shall have sufficient authority and organizational freedom to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions.

In general, assurance of quality requires management measures which provide that the individual or group assigned the responsibility for checking, auditing, inspecting, or otherwise verifying that an activity has been correctly performed is independent of the individual or group directly responsible for performing the specific activity.

#### 3.2 Executive Vice President

The Executive Vice President has been assigned the responsibility for the engineering, construction, and operation of all physical facilities. These responsibilities are implemented in part by acting through the Vice President Plant Engineering & Construction, the Vice President Transmission & Operations Services and the Vice President Power Production & System Operation. The Vice President Power Production & System Operation has line responsibility relative to nuclear plant operation. In addition, the Executive Vice President has been designated by Presidential Directive as being responsible for establishing an Operational Quality Assurance Program.

#### 3.3 Vice President Plant Engineering & Construction

The Vice President Plant Engineering & Construction is responsible for the design and construction of major generating plant facilities. He is also responsible for major modifications to operating nuclear plants.

The Vice President Plant Engineering & Construction is also responsible for performing required quality inspections of vendors.

These responsibilities are implemented by acting through the Manager Nuclear Plant Projects via the General Manager Plant Engineering & Construction and through the Manager Quality Assurance.

#### 3.3.1 General Manager Plant Engineering & Construction

The General Manager Plant Engineering & Construction reports to the Vice President Plant Engineering & Construction and is responsible for the design, fabrication, erection, construction, testing and inspection of new generating facilities. He is also responsible for implementing major modifications to operating nuclear plants assigned to the Plant Engineering & Construction Department. These responsibilities, with respect to nuclear plants, are implemented by acting through the Manager Nuclear Plant Projects.

#### 3.3.2 Manager Quality Assurance

The Manager Quality Assurance reports to the Vice President Plant Engineering & Construction and is responsible for implementation and direction of the Construction Quality Assurance Program. He is also responsible for the following quality activities pertaining to the Operational Quality Assurance Program:

1. Conducting required quality inspections of vendors.
2. Performing required procurement quality review on major plant modification projects assigned to the Plant Engineering & Construction Department.

#### 3.4 Vice President Transmission & Operations Services

The Vice President Transmission & Operations Services reports to the Executive Vice President and is responsible for the design and construction of the Company's electrical transmission system and substations. He is also responsible for providing certain testing, maintenance, security, purchasing and drafting services to other Company Departments.

These responsibilities are implemented in part by acting through the General Manager Maintenance & Testing, the Manager Substation Engineering & Construction and the Director Operating Services.

##### 3.4.1 Director Operating Services

The Director Operating Services reports to the Vice President Transmission & Operations Services and has Corporate responsibility for the following services:

1. Procurement of material and services
2. Plant security

These responsibilities are implemented by acting through the Manager Purchasing & Materials and the Administrator of Security via the Manager Insurance & Security.

#### 3.4.2 General Manager Maintenance & Testing

The General Manager Maintenance & Testing reports to the Vice President Transmission & Operations Services and is responsible for providing the following services to other Company Departments:

1. Electrical device maintenance and testing.
2. Breaker maintenance and testing.
3. Chemical analysis.
4. Mechanical testing.
5. Metallurgical testing and examination.
6. Air filter testing.

#### 3.4.3 General Manager Substation Engineering & Construction

The General Manager Substation Engineering & Construction reports to the Vice President Transmission & Operations Services and is responsible for the engineering, design and construction of the Company's substation facilities. He is also responsible for providing required drafting services to other Company Departments.

### 3.5 Vice President Power Production & System Operation

The Vice President Power Production & System Operation reports to the Executive Vice President and has Corporate line responsibility for the operation and physical control of the Company's generating facilities and for the operation of the Company's Electrical System. These areas of responsibility include the following:

1. Operation and maintenance of generating facilities and plant substations.
2. Electrical System operation.
3. Minor modifications to generating facilities.
4. Generating facility fuel procurement, utilization and disposition.
5. Independent review and audit of nuclear plant operations and operating license administration.

These responsibilities are implemented in part by acting through the Manager System Operation, the Manager Fuel Procurement, the Manager Nuclear Support Services and the General Manager Power Production.

3.6 Manager System Operation

The Manager System Operation reports to the Vice President Power Production & System Operation and is responsible for operation of the Company's Electrical System including the plant substations.

3.7 Manager Fuel Procurement

The Manager Fuel Procurement reports to the Vice President Power Production & System Operation and is responsible for procurement and disposition of fuel for the Company's generating facilities. These areas of responsibility include the following:

1. Procuring nuclear and fossil fuels.
2. Delivery of nuclear and fossil fuels to generating facility sites.
3. Quality activities associated with fabrication and manufacture of nuclear fuel.
4. Disposition of depleted nuclear fuel.

3.8 Manager Nuclear Support Services

The Manager Nuclear Support Services reports to the Vice President Power Production & System Operation and is responsible for technical support, independent review and audit of nuclear plant operation, and administration of NRC Operating Licenses including the associated Technical Specifications.

3.9 General Manager Power Production

The General Manager Power Production reports to the Vice President Power Production & System Operation and is responsible for operation, maintenance, minor modification, testing, and overall management of all generating plants. These responsibilities include the following specific items:

1. Developing and maintaining a plant and General Office organization capable of safely, efficiently, and reliably operating, maintaining, modifying and testing generating facilities.
2. Provide overall direction and control of the department's activities.
3. Determine and allocate the resources of manpower and material for department functions.
4. Provide necessary interfacing with other NSP activities.

These responsibilities are implemented in part by acting through the General Superintendent Production Plant Projects, the General



Superintendent Power Plant Maintenance, the General Superintendent Electric Plant, the General Superintendent Nuclear Plant Operation and the General Superintendent Operational Quality Assurance.

3.10 General Superintendent Power Plant Maintenance

The General Superintendent Power Plant Maintenance reports to the General Manager Power Production and is responsible for the overall supervision of mechanical maintenance activities, planning, and scheduling of major maintenance, and for providing departmental operating and maintenance training services.

3.11 General Superintendent Production Plant Projects

The General Superintendent Production Plant Projects reports to the General Manager Power Production and is responsible for coordinating activities between the Power Division and the Plant Engineering & Construction Department on new plant design, major plant modification projects, and with the generating plants on minor plant modification projects.

3.12 General Superintendent Electric Plant

The General Superintendent Electric Plant reports to the General Manager Power Production and is responsible for the electrical aspects of fossil and nuclear fueled plant operation and maintenance and maintenance of plant substations.

3.13 General Superintendent Operational Quality Assurance

The General Superintendent Operational Quality Assurance reports to the General Manager Power Production and is responsible for establishing and maintaining an Operational Quality Assurance Program relative to General Office activities associated with Operating Nuclear Plants.

3.14 General Superintendent Nuclear Plant Operation

The General Superintendent Nuclear Plant Operation reports to the General Manager Power Production and is responsible for the safe and reliable operation of the nuclear fueled generating facilities. These responsibilities are implemented in part by acting through the Nuclear Plant Managers.

3.15 Nuclear Plant Managers

The Plant Managers of the Nuclear Plants report to the General Superintendent Nuclear Plant Operation and are responsible for the safe and reliable operation of their respective plant and for assuring that the activities of the plant staff comply with applicable regulatory requirements. These responsibilities are implemented in part by acting through the Superintendent Plant Engineering & Radiation Protection and the Superintendent Operation & Maintenance.



### 3.16 Superintendent Plant Engineering & Radiation Protection

The Superintendent Plant Engineering & Radiation Protection reports to the Plant Manager and is responsible for the technical direction of the plant operations. He directs and coordinates the activities of the Radiation Protection Engineer (Supervisor), the Plant Engineer Technical, and the Plant Engineer Operations; and administratively supervises the Quality Engineer.

The Quality Engineer is responsible for the administration, coordination and audit of the Plant Operational Quality Assurance Program.

### 3.17 Superintendent Operations & Maintenance

The Superintendent Operations & Maintenance reports to the Plant Manager and is responsible for direction of plant operation and maintenance. He is responsible for operation, maintenance, safety of all plant equipment, and the safety and actions of all personnel involved in plant operations.

### 3.18 References

Specific responsibilities are presented in each functional Administrative Control Directive. The following Administrative Control Directives are devoted to organizational considerations:

1. LACD 3.1 Organization (Corporate)
2. 2ACD 3.1 Organization (Power Production & System Operation)
3. 3ACD 3.1 Organization (Power Production Department)
4. 4ACD 3.1 Monticello Plant Organization
5. 5ACD 3.1 Prairie Island Plant Organization

## 4.0 Operational Quality Assurance Program

### 4.1 General Requirements

An Operational Quality Assurance Program shall be established at the the earliest practicable time, consistent with the schedule for accomplishing the activities which complies with the requirements of this plan.

The program shall be:

- a. Documented by written policies, procedures, or instructions and shall;
- b. Be carried out throughout plant operating life in accordance with those policies, procedures, or instructions.

The Program shall include identification of.

- a. The structures, systems, and components to be covered.
- b. The major organizations participating in the Program, together with the designated functions of these organizations.

The Program shall provide control over activities affecting the quality of the identified structures, systems, and components to the extent consistent with their importance with safety.

Activities affecting quality shall be accomplished under suitable controlled conditions. Controlled conditions include the use of appropriate equipment; suitable environmental conditions for accomplishing the activity, such as adequate cleanliness; and assurance that all prerequisites for the given activity have been satisfied.

The Program shall take into account the need for special controls, processes, test equipment, tools, and skills to attain the required quality, and the need for verification of quality by inspection and test. The Program shall provide for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained. The adequacy and status of the Program shall be regularly reviewed.

Management of other organizations participating in the Program shall regularly review the status and adequacy of that part of the Program which they are executing.

#### 4.2 General Description

The Operational Quality Assurance Program has been established to govern the operational activities and the activities necessary to support operation of the Company's nuclear plants operated under an NRC Operating License. The program has been initiated by the President of the Company issuing a single directive to the executive Vice President establishing him as being responsible for formulating and implementing an Operational Quality Assurance Program and identifying the program objectives.

The Operational Quality Assurance Program shall utilize the following documents to meet the program objectives:

1. Operational Quality Assurance Plan (Plan).
2. Administrative Control Directives (Directives).
3. Administrative Work Instructions (Instructions).
4. Required Procedures (Procedures).

The Plan shall be considered an overall document which governs the implementing documents, i.e. Directives, Instructions, and Procedures.

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For ease of administration, the implementing documents shall be issued at the following four (4) levels.

1. Corporate; Issuing Authority, Executive Vice President.
2. Power Production & System Operation; Issuing Authority, Vice President Power Production & System Operation.
3. Power Production Department; Issuing Authority, General Manager Power Production.
4. Plants (Prairie Island & Monticello); Issuing Authority, Plant Manager.

Figures 4-1 and 4-2 diagram the above program subdivisions.

#### 4.3 Operational Quality Assurance Plan

The Operational Quality Assurance Plan shall be an overall document which describes in general terms how compliance with the quality requirements presented in 10CFR50 Appendix B is accomplished with respect to company nuclear plants regulated by an NRC Operating License.

The Operational Quality Assurance Plan shall be issued under the authority of the Executive Vice President and shall be reviewed periodically.

#### 4.4 Administrative Control Directives

Administrative Control Directives (Directives) shall be documents which establish responsibility and requirements governing activities associated with plant operation. Directives shall be first tier implementing documents and shall receive a quality review prior to issuance. The quality review shall assure compliance with the Operational Quality Assurance Program objectives.

Administrative Control Directives shall be issued at each level of the program as necessary. It is mandatory that the Directives at the Corporate Level assure compliance with all applicable requirements of 10CFR50 Appendix B. The Directives issued at any of the lower levels of the program are not expected to satisfy all 10CFR50 Appendix B requirements but shall implement responsibilities assigned by the higher level Directives.

All Directives shall be controlled and reviewed periodically.

#### 4.5 Administrative Work Instructions

Administrative Work Instructions (Instructions) shall be documents which provide guidelines or instructions for the implementation of the requirements of Administrative Control Directives. Instructions shall be second tier implementing documents and shall receive a

quality review prior to issuance. The quality review shall assure compliance with pertinent Directive requirements and assigned responsibilities.

Administrative Work Instructions may be issued at each level of the program by responsible individuals. Instructions shall generally be utilized for department interfacing.

All Administrative Work Instructions shall be controlled and reviewed periodically.

#### 4.6 Procedures

Procedures shall be documents which provide specific instructions for performing an activity. Procedures shall be third tier documents utilized to perform safety-related activities as required by the applicable NRC Operating License Technical Specifications.

In addition procedures shall be provided where applicable, to assure that activities important to safety are performed in the required manner. Required procedures shall be reviewed and approved as required by the applicable Technical Specifications. Required Procedures shall be controlled and reviewed periodically.

#### 4.7 Program Administration

Administration of the General Office levels of the Operational Quality Assurance Program shall be performed by the Quality Assurance Section of the Power Production Department. Administration of the Plant level of the program shall be performed by the Plant Quality Engineer.

Program administration shall include the following activities:

1. Quality review of Directives.
2. Quality review of Instructions.
3. Control of Directives & Instructions.
4. Procurement review.
5. Performance of required audits.
6. Reporting to management concerning:
  - a. Program status.
  - b. Program deficiencies.

Figure 4-1

Operational Quality Assurance Program Subdivision

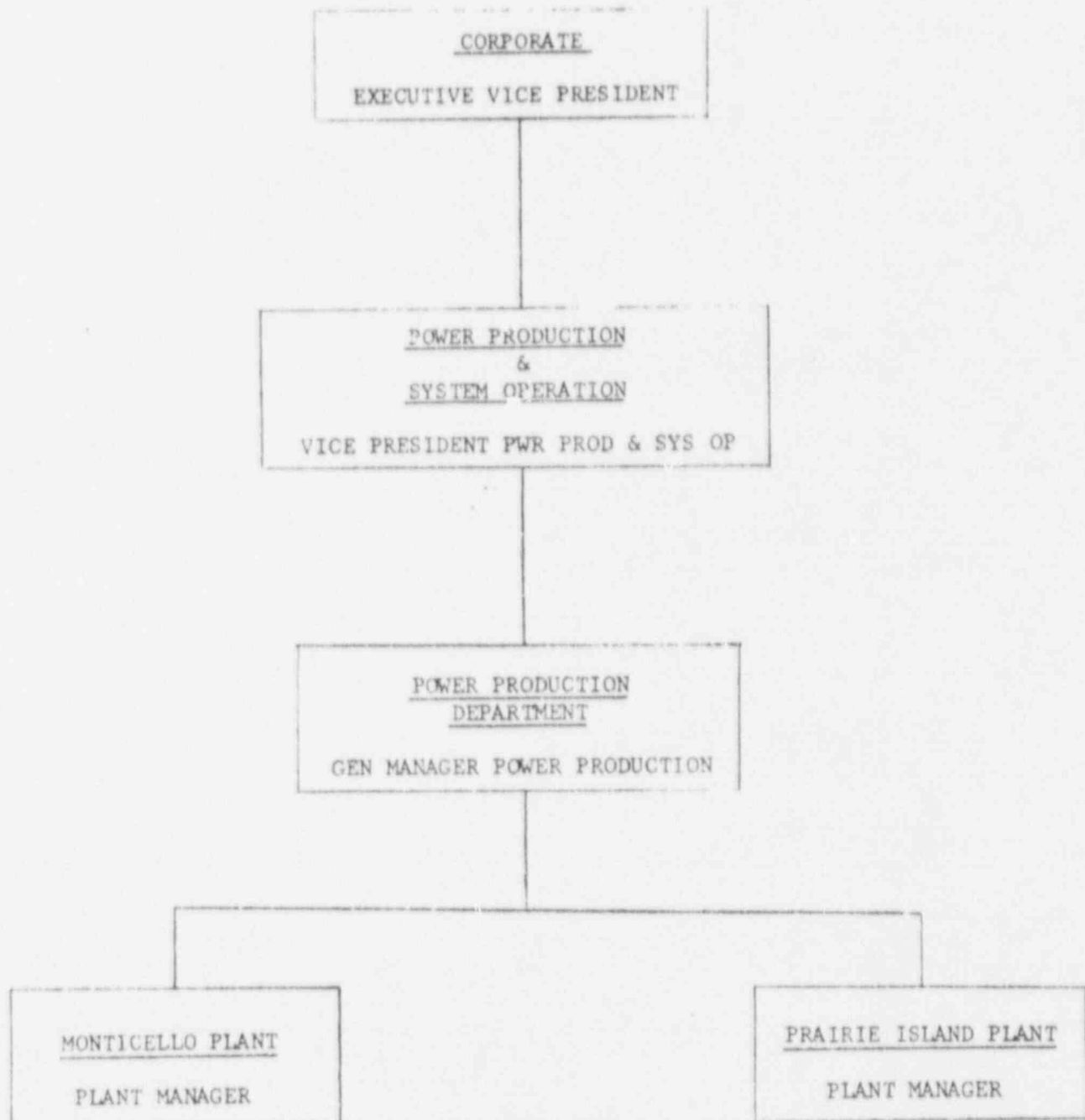
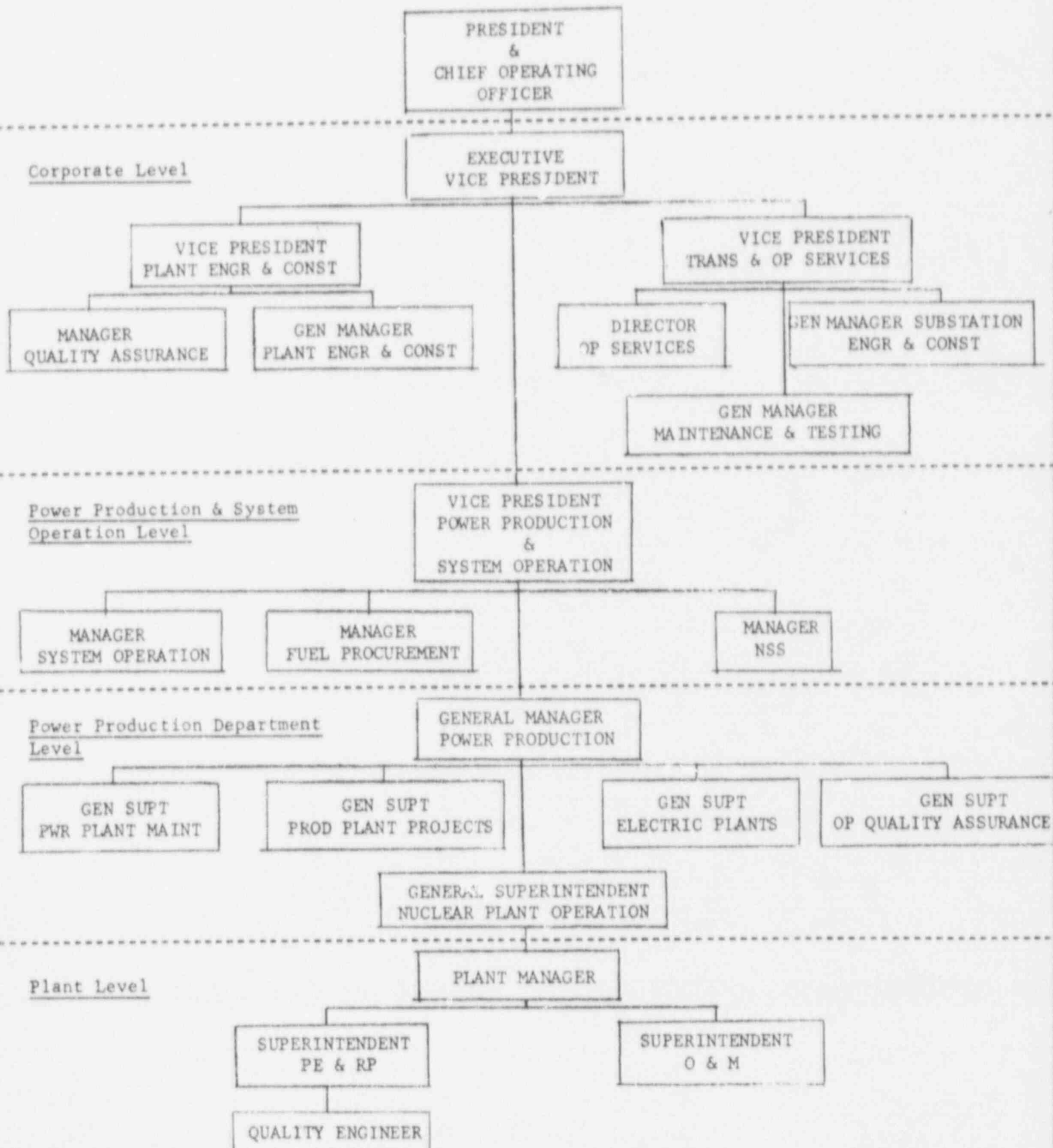


Figure 4-2

Operational Organization - QA Program Level





## 5.0 Design Control

### 5.1 General Requirements

Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design and be approved by the organization that performed the original design unless the applicant designates another responsible organization.

### 5.2 Design Change Control

A uniform system for controlling design changes to nuclear plants shall be provided in the Operational Quality Assurance Program. Provisions of this system shall include the following provisions:

1. Assurance that the change is reviewed and approved as required by the Technical Specifications and 10CFR 50.59.
2. Plant Documentation is revised as appropriate and new documentation generated where needed.
3. Appropriate Safety Evaluations are performed.
4. Appropriate analyses are performed including those required by 10CFR 50 Appendix B.
5. Appropriate installation procedures are prepared and utilized.
6. Technical Specification changes are prepared, reviewed and approved if required.
7. Tests and inspection are performed as necessary.
8. Plant procedures are reviewed and revised as appropriate.
9. Appropriate hold points are established.

- 5.3 The following Operational Quality Assurance Program documents are utilized for controlling design changes.

#### A. General Office Directives

1. 1ACD 3.3 Design Change Control
2. 3ACD 4.1 Design Change Control
3. 3ACD 4.2 Design Change Installation Procedures
4. 3ACD 4.3 Design Change Preoperational/Operational Procedures
5. 3ACD 3.7 Work Authorization

#### B. Monticello Directives

1. 4ACD 3.6 Work Request Authorization

#### C. Prairie Island Directive

1. 5ACD 3.2 Work Request & Work Request Authorization



## 6.0 Procurement Document Control

### 6.1 General Requirements

Measures shall be established to assure that applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services, whether purchased by NSP or by its contractors or subcontractors. To the extent necessary, procurement documents shall require contractors or subcontractors to provide a quality assurance program consistent with the pertinent provisions of 10CFR50 Appendix B.

### 6.2 Technical & Quality Requirements

The Operational Quality Assurance Program shall contain provisions for controlling procurement of material, equipment, components, and services that are safety related and utilized at an operating nuclear plant.

Procurement documents shall contain specific technical and quality requirements. Renewal, spare and replacement parts shall be required to meet the original specification or Construction Code, Quality Assurance documentation requirements, and vendor quality assurance program requirements.

### 6.3 Quality Assurance Review

Documents initiating procurement of safety related material, equipment, components or services shall be subject to a quality assurance review to insure applicable regulatory requirements, design bases, Quality Assurance and other requirements are adequately satisfied.

Quality Assurance requirements shall include identification of applicable elements of 10CFR50 Appendix B that are required to be included in the vendor's Quality Assurance program, including identification of applicable documentation requirements such as chemical analysis reports, material certification, testing results, testing reports and time and frequency of submittals.

### 6.4 References

The following Operational Quality Assurance Program documents are utilized to control procurement:

#### A. General Office Directives

1. 1ACD 5.1 Procurement Control
2. 1ACD 5.2 Technical & Quality Requirements
3. 2ACD 4.1 Procurement Control
4. 2ACD 5.1 Nuclear Fuel Quality Assurance Program
5. 3ACD 6.1 Procurement Control

B. Monticello Directives

1. 4ACD 8.1 Procurement Process
2. 4ACD 8.2 Procurement Requirements

C. Prairie Island Directive

1. 5ACD 7.1 Procurement Process

7.0 Instructions, Procedures & Drawings

7.1 General Requirements

Directives, Instructions, procedures and drawings of a type appropriate to the circumstances shall be provided for the control and performance of activities which affect the quality of safety related structures, systems or components.

Directives, Instructions, procedures and drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

7.2 Directives & Instructions

Procedures of a type appropriate to the circumstances shall be provided for the performance of activities which affect the quality of safety related structures, systems or components.

The following procedures shall be provided:

1. Operating Procedures
2. Surveillance Test Procedures
3. Major Maintenance Procedures
4. Plant Chemistry & Count Room Procedures
5. Radiation Protection Procedures
6. Emergency Plan Procedures
7. Plant Security Procedures
8. Special Process Procedures
9. Preoperational & Operational Test Procedures
10. Audit Procedures
11. Document Control Procedures

### 7.3 Drawings & Instruction Manuals

Drawings and instruction manuals of a type appropriate to the circumstances may be utilized as procedural documents for conducting activities which affect the quality of safety related structures, systems or components.

### 7.4 References

The following Operational Quality Assurance documents establish procedure requirements:

1. 1ACD 3.2 Plant Operation
2. 1ACD 3.4 Nuclear Plant Security
3. 2ACD 3.2 Plant Operation
4. 3ACD 3.2 Plant Operation
5. 3ACD 3.3 Plant Maintenance
6. 3ACD 4.1 Design Change Control
7. 3ACD 4.2 Design Change Installation Procedures
8. 3ACD 4.3 Design Change Preoperational & Operational Test Procedures
9. 3ACD 5.1 Drawing Control
10. 3ACD 5.3 Drawing Revision
11. 3ACD 7.1 Welding Procedures
12. 3ACD 7.4 NDE Procedures
13. 3ACD 9.2 Surveillance Test Procedures
14. 3ACD 10.1 Chemical Analysis Procedures
15. 3ACD 10.2 Count Room Procedures

## 8.0 Document Control

### 8.1 General Requirements

Measures shall be established to control the issuance of documents, such as Directives, Instructions, procedures and drawings, including changes thereto, which prescribe activities affecting quality.

These measures shall assure that documents, including changes, are:

1. Reviewed for adequacy and approved for release by authorized personnel and;

2. Are distributed to and used at the location where the prescribed activity is performed.

Changes to documents shall be reviewed and approved by the same organization that performed the original review and approval or another designated responsible organization.

#### 8.2 Directive Control

Directives issued to implement the Operational Quality Assurance Program shall be controlled to assure that current copies are made available to personnel performing the prescribed activities. Directives shall be reviewed by quality assurance personnel to assure their compatibility with the Operational Quality Assurance Program objectives and shall be approved by the issuing authority.

Changes to Directives shall be reviewed and approved in the same manner as the original.

#### 8.3 Instruction Control

Instructions issued to implement provisions of Directives shall be controlled to assure that current copies are made available to personnel performing the prescribed activities. Instructions shall be reviewed by quality assurance personnel to assure that they are compatible with pertinent Directive provisions and shall be approved by the issuing authority.

Changes to Instructions shall be reviewed in the same manner as the original.

#### 8.4 Procedure Control

Required procedures shall be controlled to assure that current copies are made available to personnel performing the prescribed activities. Required procedures shall be reviewed by a knowledgeable individual and shall be approved by a management member of the organization responsible for the prescribed activity. Required procedures shall also be reviewed and approved as required by the Technical Specifications.

Significant changes to required procedures shall be reviewed and approved in the same manner as the original and shall comply with applicable provisions of the Technical Specifications.

#### 8.5 Drawing Control

Drawings which represent the physical and functional aspects of the Operating Nuclear Plants and which are critical to safe plant operation or safety of personnel shall be maintained in a current status.

Measures shall be established for revising plant drawings and for distributing revised drawings. Proposed revisions to drawings shall be reviewed by a knowledgeable individual to determine the safety significance and appropriateness of the change.

## 8.6 References

The following Operational Quality Assurance Program documents are utilized to control documents:

### A. General Office Directives

1. 1ACD 1.1 Administrative Control Directives
2. 1ACD 1.2 Administrative Work Instructions
3. 1ACD 4.1 Document Control
4. 1ACD 4.2 Plant Turnover
5. 2ACD 1.1 Administrative Control Directives
6. 2ACD 1.2 Administrative Work Instructions
7. 3ACD 1.1 Administrative Control Directives
8. 3ACD 1.2 Administrative Work Instructions
9. 3ACD 3.9 Procedure Review and Approval
10. 3ACD 5.1 Drawing Control
11. 3ACD 5.2 Specification Control
12. 3ACD 5.3 Drawing Revision
13. 3ACD 5.4 Specification Revision

### B. Monticello Directives

1. 4ACD 1.1 Administrative Control Directives
2. 4ACD 1.2 Administrative Work Instructions
3. 4ACD 3.10 Document Control
4. 4ACD 3.11 Procedure Review And Approval

### C. Prairie Island Directives

1. 5ACD 1.1 Administrative Control Directives
2. 5ACD 1.2 Administrative Work Instructions
3. 5ACD 4.1 Update Copies of the Operations Manual
4. 5ACD 4.2 Blank Forms
5. 5ACD 4.3 Drawing Revisions
6. 5ACD 4.4 Drawing Control

## 9.0 Control of Purchased Material, Equipment and Services

### 9.1 General Requirements

Measures shall be established to assure that purchased material, equipment and services conform to the procurement documents. These measures shall include provisions, as appropriate, for vendor evaluation and selection, objective evidence of quality furnished by the vendor, inspection at the vendor source, and examination of products upon delivery.

Documentary evidence that material and equipment conform to the procurement requirements shall be available at the plant site prior to installation or use of such material and equipment. This documentary evidence shall be retained at the plant site and shall be sufficient to indicate that the purchased material and equipment meet the specific requirements of the codes, standards, or specifications.

The effectiveness of the control of quality by vendors shall be assessed at intervals consistent with the importance, complexity and quality of the product or service.

### 9.2 Quality Review

Documents initiating procurement of safety related material, equipment and services shall be subject to a quality review to ensure applicable regulatory requirements, design bases, Quality Assurance and other requirements are adequately satisfied.

Quality Assurance requirements shall include identification of applicable elements of 10CFR50 Appendix B that are required to be included in the vendor's Quality Assurance program.

### 9.3 Vendor Inspection

The adequacy of vendor's quality assurance program specified in procurement documentation shall be verified prior to use of the procured material, equipment, or service. Verification shall include inspections of the vendor's facility for adherence to their Quality Assurance Program to the extent appropriate for the procured material, equipment or service.

### 9.4 Receipt Inspection

Material and equipment shall be inspected upon receipt at the plant site and prior to use to determine that procurement requirements are satisfied. This inspection shall include verification that required documentation is complete.

Non-conforming material and equipment shall be controlled to assure such material or equipment is not utilized to fulfill a safety related function prior to an acceptable resolution of the deficiencies.

### 9.5 References

The following Operational Quality Assurance Program documents are utilized to control purchased material, equipment and services:

#### A. General Office Directives

1. 1ACD 5.1 Procurement Control
2. 1ACD 5.2 Technical & Quality Requirements
3. 1ACD 5.3 Vendor Inspection
4. 1ACD 5.4 Material Storage
5. 2ACD 4.1 Procurement Control
6. 2ACD 5.1 Nuclear Fuel Quality Assurance Program
7. 3ACD 6.1 Procurement Process
8. 3ACD 6.2 Receiving Process
9. 3ACD 6.3 Material Storage

#### B. Monticello Directives

1. 4ACD 8.1 Procurement Process
2. 4ACD 8.2 Procurement Requirements
3. 4ACD 9.1 Receiving Process

#### C. Prairie Island Directives

1. 5ACD 7.1 Procurement Process
2. 5ACD 8.1 Receiving Process

## 10.0 Identification and Control of Materials, Parts and Components

### 10.1 General Requirements

Measures shall be established for the identification and control of materials, parts and components, including partially fabricated assemblies. These measures shall assure that identification of the item is maintained by heat number, part number, serial number or other appropriate means, either on the item or on records traceable to the item, as required throughout fabrication, erection, installation and use of the item.

These identification and control measures shall be designed to prevent the use of incorrect or defective material, parts and components.



#### 10.2 Spare Parts Control

Spare parts held for future use on safety related components shall be controlled in such a manner that assures they will perform their safety function when utilized. These spare parts shall be identified with the associated procurement documentation.

Measures shall be taken which assures these items are in an appropriate condition for use or will be placed in such a condition prior to use.

#### 10.3 Material Control

Material held in storage for use on safety related systems, structures or equipment shall be controlled in such a manner as to prevent its degradation and to assure the rejection of incorrect or defective material. This material shall be identified by heat number or other appropriate means, either on the item or on records traceable to the item.

#### 10.4 Receipt Inspection

Material, parts and components that are to be utilized to fulfill a safety related function shall be inspected upon receipt to assure that associated procurement document provisions have been satisfied. Measures shall be established for identifying non-conforming material, parts and components.

#### 10.5 Nuclear Fuel Control

Measures shall be established to protect Special Nuclear Material against theft or diversion in accordance with applicable NRC regulations.

#### 10.6 References

The following Operational Quality Assurance Program documents are utilized in identification and control of materials, parts and components:

##### A. General Office Directives

1. 1ACD 5.4 Material Storage
2. 1ACD 3.4 Nuclear Plant Security
3. 1ACD 5.1 Procurement Control
4. 2ACD 4.1 Material Control
5. 2ACD 5.1 Nuclear Fuel Quality Assurance Program
6. 3ACD 3.4 Plant Security
7. 3ACD 6.2 Receiving Process
8. 3ACD 6.3 Material Storage
9. 3ACD 6.4 Inventory Control
10. 3ACD 7.3 Weld Material Control

B. Monticello Directives

1. 4ACD 9.1 Receiving Process
2. 4ACD 9.2 Inventory Control
3. 4ACD 3.4 Plant Security

C. Prairie Island Directives

1. 5ACD 8.1 Receiving Process
2. 5ACD 8.2 Inventory Control
3. 5ACD 5.1 Plant Security

11.0 Control of Special Processes

11.1 General Requirements

Measures shall be established to assure that special processes, including welding, heat treating, and non-destructive examination are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria and other special requirements.

11.2 Welding Procedures

Safety related welding shall be performed in accordance with qualified welding procedures. Safety related welding procedures shall be qualified in accordance with applicable codes and standards and shall be reviewed and approved in accordance with applicable provisions of the associated Technical Specifications.

Measures shall be established for controlling welding procedures that assures such procedures are qualified, reviewed and approved, as required, prior to use.

11.3 Welder Qualification

Measures shall be established that assure safety related welding is performed by qualified personnel. Welders shall be qualified, and requalified, in accordance with applicable codes and standards.

Measures shall be established for controlling welder qualification and requalification that assures qualified personnel are utilized to perform safety related welds.

11.4 Heat Treating Procedures

Heat treating shall be performed in accordance with procedures formulated and approved in accordance with applicable codes and standards.

11.5 NDE Procedures

Safety related non-destructive examinations (NDE) shall be performed in accordance with procedures formulated in accordance with applicable codes and standards and shall be reviewed and approved in accordance with applicable provisions of the associated Technical Specifications.

Measures shall be established for controlling NDE procedures that assures such procedures are reviewed and approved, as required, prior to use.

11.6 NDE Personnel Qualification

Measures shall be established that assure safety related non-destructive examinations (NDE) are performed by personnel qualified and requalified in accordance with applicable codes and standards.

Measures shall be established for controlling NDE personnel qualification and requalification that assures qualified personnel are utilized to perform safety related non-destructive examinations.

11.7 References

The following Operational Quality Assurance Program documents are utilized to control the special processes.

A. General Office Directives

1. 1ACD 3.2 Plant Operation
2. 1ACD 8.4 Material Inspection Procedures
3. 2ACD 3.2 Plant Operation
4. 3ACD 3.3 Plant Maintenance
5. 3ACD 4.2 Design Change Installation Procedures
6. 3ACD 7.1 Welding Procedures
7. 3ACD 7.2 Welder Qualifications
8. 3ACD 7.4 NDE Procedures
9. 3ACD 7.5 NDE Personnel Qualifications

B. Monticello Directives

1. 4ACD 5.2 Mechanical & Electrical Equipment Maintenance Procedures
2. 4ACD 12.1 Plant Welding Practices
3. 4ACD 12.3 Non-destructive Examination Procedures
4. 4ACD 12.4 Plant Heat Treating Procedures

C. Prairie Island Directives

1. SACD 9.1 Qualification of Welders

12.0 Inspection

12.1 General Requirements

Measures shall be established for inspection of activities affecting quality to verify conformance with the documented instructions, procedures and drawings for accomplishing the activity. Such inspections shall be performed by individuals other than those who performed the activity being inspected.

Examinations, measurements or tests of material or products shall be performed for each work operation where necessary to assure quality. If inspection of processed material or products is impossible or disadvantageous, indirect control by monitoring processing methods, equipment and personnel shall be provided.

Both inspection and process monitoring shall be provided when control is inadequate without both.

If mandatory inspection hold points, which require witnessing or inspection and beyond which work shall not proceed without prior consent, the specific hold points shall be indicated in appropriate documents.

12.2 Plant Operation

Measures shall be established that assure periodic inspection of safety related systems, components, and structures. Such inspections shall assure that these systems, components and structures can fulfill their safety function.

The following reactor operation hold points shall be established:

1. Refueling Inspection; an inspection of the core shall be performed prior to startup following initial fuel loading or refueling to assure specified fuel and reactor internal configuration.
2. Reactor Startup; an inspection shall be performed to assure that safety related systems, components and structures have been placed in the required status.
3. Reactor Re-Start; the cause of reactor trips initiated by the reactor protection system shall be investigated and satisfactorily resolved prior to restart of the reactor.

### 12.3 Inservice Inspection

Measures shall be established that assure inservice inspections are performed in accordance with pertinent provisions of the ASME Boiler and Pressure Vessel Code, Section XI and applicable Technical Specifications.

### 12.4 Plant Modification & Maintenance

Measures shall be established which assure that plant modification and maintenance activities are inspected as required by applicable codes and standards. Hold points shall be established as appropriate.

### 12.5 Vendor Inspections

Measures shall be established which assure that inspections and process monitoring requirements are specified in appropriate procurement documents for safety related material, components and equipment when required. Hold points shall be established which assure that required inspections and process monitoring are performed.

### 12.6 References

The following Operational Quality Assurance Program documents are utilized to control inspection activities:

#### A. General Office Directives

1. 1ACD 3.2 Plant Operation
2. 1ACD 3.3 Design Change Control
3. 1ACD 5.1 Procurement Control
4. 1ACD 5.2 Technical & Quality Requirements
5. 1ACD 5.3 Vendor Inspection
6. 2ACD 3.2 Plant Operation
7. 2ACD 5.1 Nuclear Fuel Quality Assurance Program
8. 3ACD 3.2 Plant Operation
9. 3ACD 3.3 Plant Maintenance
10. 3ACD 4.1 Design Change Control

#### B. Monticello Directives

1. 4ACD 4.2 Integrated Operating Procedures

2. 4ACD 5.1 Mechanical & Electrical Equipment Preventive Maintenance Program
3. 4ACD 6.1 Instrumentation & Controls Preventive Maintenance Program
4. 4ACD 8.1 Procurement Process
5. 4ACD 8.2 Procurement Requirements
6. 4ACD 14.2 Refueling Outage Procedures

C. Prairie Island Directives

1. 5ACD 4.1 Update Copies of the Operations Manual
2. 5ACD 7.1 Procurement Process

13.0 Test Control

13.1 General Requirements

Measures shall be established to assure that all testing required to demonstrate that structures, systems and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable documents. Proof tests prior to installation, preoperational tests, and operational tests during nuclear power plant operation, of structures, systems and components shall be included as appropriate.

Test procedures shall include provisions for assuring that all prerequisites for the given test have been met, that adequate test instrumentation is available and used, and that the test is performed under suitable environmental conditions. Test results shall be documented and evaluated to assure that test requirements have been satisfied.

13.2 Surveillance Tests

A surveillance test program shall be established to assure that testing required to demonstrate that safety related structures, systems and components will perform satisfactorily in service. Surveillance tests shall be identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable documents. The surveillance test program shall include, as a minimum, those surveillance tests specified in applicable Technical Specifications except those included in the Inservice Inspection Program.

Surveillance test results shall be documented and evaluated to assure that test requirements have been satisfied or deficient items satisfactorily resolved.

### 13.3 Preoperational & Operational Tests

Measures shall be established to assure that appropriate preoperational and operational tests are performed on safety related structures, systems and components that have been subject to modification or significant maintenance. Such tests shall be performed in accordance with appropriate procedures. Test results shall be documented and evaluated to assure that test requirements have been satisfied or deficient items satisfactorily resolved.

### 13.4 Proof Tests

Measures shall be established to assure that appropriate proof tests are specified in procurement documents for safety related replacement material and equipment and that such tests are performed and documented prior to installation.

### 13.5 Special Tests

Measures shall be established that assure safety related tests are reviewed and approved as required by 10CFR50.59 and applicable Technical Specifications. Such tests shall be performed in accordance with appropriate procedures. Test results shall be documented and evaluated to assure test requirements have been satisfied.

### 13.6 References

The following Operational Quality Assurance Program documents are utilized to control safety related tests:

#### A. General Office Directives

1. 1ACD 3.3 Design Change Control
2. 1ACD 5.1 Procurement Control
3. 1ACD 3.2 Plant Operation
4. 2ACD 3.2 Plant Operation
5. 3ACD 4.1 Design Change Control
6. 3ACD 4.3 Design Change Preoperational/Operational Testing
7. 3ACD 6.1 Procurement Process
8. 3ACD 9.1 Surveillance Test Program
9. 3ACD 9.2 Surveillance Test Procedures

#### B. Monticello Directives



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1. 4ACD 8.1 Procurement Process
2. 4ACD 8.2 Procurement Requirements
3. 4ACD 13.1 Surveillance Program
4. 4ACD 13.2 Surveillance Procedures

C. Prairie Island Directives

1. 5ACD 7.1 Procurement Process
2. 5ACD 4.1 Updated Copies of the Operations Manual

14.0 Control of Measuring & Test Equipment

14.1 General Requirements

Measures shall be established to assure that tools, gages, instruments and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated and adjusted at specified periods to maintain accuracy within necessary limits.

14.2 Installed Plant Instrumentation

Measures shall be established to assure that installed safety related plant instrumentation is maintained and periodically calibrated to maintain accuracy within necessary limits. Maintenance and calibration of safety related instrumentation shall be performed in accordance with appropriate procedures and shall be controlled and documented.

14.3 Measuring & Test Instrumentation

Measures shall be established to assure that tools (micrometer, calipers, etc.), gages, instruments and other inspection, measuring, test equipment and devices used to verify conformance to established requirements are maintained and periodically calibrated to maintain accuracy within necessary limits. Calibration of such measuring and test equipment shall be controlled and shall be traceable to the National Bureau of Standards or where national standards are not available, the basis of calibration shall be documented.

14.4 References

The following Operational Quality Assurance Program documents are utilized to control safety related measuring and test equipment:

A. Corporate Directives

1. 1ACD 3.2 Plant Operation
2. 1ACD 8.6 Instrumentation Calibration Program

B. Power Production & System Operation Directives

1. 2ACD 3.2 Plant Operation

C. Power Production Department Directives

1. 3ACD 3.3 Plant Maintenance
2. 3ACD 9.3 Instrument Calibration Program

D. Monticello Directives

1. 4ACD 6.4 Control of Measuring & Test Equipment
2. 4ACD 6.1 Instrumentation & Controls Preventive Maintenance Program

15.0 Handling, Storage and Shipping

15.1 General Requirements

Measures shall be established to control the handling, storage, shipping, cleaning and preservation of safety related material and equipment in accordance with work and inspection instructions to prevent damage or deterioration.

When necessary for particular products, special protective environments such as inert gas atmosphere, humidity levels, and temperature levels, shall be specified and identified.

15.2 Storage Facilities

Storage facilities shall be provided at each operating nuclear plant for storage of safety related operating and maintenance supplies, spare parts, replacement parts, replacement equipment, materials and tools. These storage facilities shall assure physical protection and protection from environmental conditions including temperature and moisture as appropriate. Storage facilities shall be arranged and equipped to facilitate control of the stored safety related items.

15.3 Nuclear Fuel Storage

Areas shall be provided for storage of nuclear fuel which assure physical protection, subcritical arrangement, adequate cooling, adequate radiation shielding and containment of radioactive material as appropriate for the condition of the stored fuel.

15.4 Radioactive Material Storage

Areas shall be provided for storage of radioactive material which assure physical protection, as low as reasonably achievable radiation exposure to personnel, control of the stored material, and containment of radioactive material as appropriate.

15.5 Storage Control

Stored material, parts and equipment shall be controlled in a manner that assures safe plant operation when and if the items are utilized. Stored safety related items shall be controlled to assure that the item performs its safety function when utilized.

15.6 Material Handling

Safety related material, supplies, equipment and parts shall be handled in accordance with procurement documentation and in accordance with appropriate material handling practices. Material handling equipment shall be subject to periodic testing and preventive maintenance which assures its operability. Appropriate operating instructions and procedures shall be provided for handling equipment.

15.7 Shipping & Packing

Shipping and packaging requirements shall be prepared for material, equipment and components that are to be shipped off site and returned for use at a nuclear plant to perform a safety related function. Such requirements shall assure that the item's safety related function is not significantly degraded while in transit.

15.8 References

The following Operational Quality Assurance Program documents are utilized to control handling, storage and shipping:

A. Corporate Directives

1. 1ACD 5.4 Material Storage

B. Power Production Department Directives

1. 3ACD 6.1 Material Storage
2. 3ACD 7.3 Weld Material Control
3. 3ACD 11.2 Nuclear Fuel Storage
4. 3ACD 11.3 Nuclear Fuel Handling & Inspection
5. 3ACD 12.1 Radioactive Material Control

C. Monticello Directives

1. 4ACD 9.5 Handling, Storage, Shipping and Preservation of Material

D. Prairie Island Directives

1. 5ACD 8.1 Receiving Process
2. 5ACD 8.2 Inventory Control
3. 5ACD 8.3 Weld Material Control
4. 5ACD 8.4 Control of Nonconforming Items

## 16.0 Inspection, Test & Operating Status

### 16.1 General Requirements

Measures shall be established to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the nuclear plant. These measures shall provide for the identification of items which have satisfactorily passed required inspections and tests, where necessary to preclude inadvertent bypassing of such inspections and tests.

Measures shall also be established for indicating the operating status of structures, systems and components of the nuclear power plant, such as by tagging valves and switches to prevent inadvertent operation.

### 16.2 Maintenance Control

Measures shall be established for the control of maintenance to safety related structures, systems and components that assures that:

1. Affected structures, systems and components are removed from service and secured in a manner consistent with operability and isolation requirements of the Technical Specifications.
2. Repair and modification activities are performed in a manner consistent with its importance to safety.
3. Upon completion of repairs and modifications the affected structures, systems and components are inspected and tested to determine that the required work was performed satisfactorily and that they will perform their safety function in the required manner.

In addition, measures shall be established to control maintenance activities that assure resulting radiation exposure to personnel is minimized and consistent with pertinent NRC regulations.

The above measures shall be implemented by utilizing appropriate work authorization processes, work procedures, safety tagging, bypass control, key control and area posting as appropriate for the involved activity.

### 16.3 Test Control

Measures shall be established for the control of tests to safety related structures, systems and components that assures that:

1. Proposed tests are reviewed and approved as required prior to performance.
2. The plant is placed in an acceptable status prior to the test, maintained in an acceptable status during the test, and returned to its normal status upon completion of the test.
3. Test results are reviewed and approved as appropriate.

The above measures shall be implemented by utilizing appropriate work authorization processes, test procedures, safety tagging, bypass control and key control as appropriate for the involved test.

#### 16.4 Safety Tagging

A safety tagging program shall be developed and utilized for control of nuclear plant equipment. This program shall contain provisions for uniquely identifying components whose operation is restricted or prohibited based upon safety considerations. Provisions shall be made for review, application, removal and documentation of such tagging.

#### 16.5 Key Control

Measures shall be established for controlling keys for safety related switches and for keys or key devices important to plant security. These measures shall include restricted distribution and periodic inventory of such keys or key devices.

#### 16.6 Bypass Control

Measures shall be established for controlling the application of devices utilized to bypass component functions that are important to safety. Such measures shall assure that:

1. Proposed bypasses to safety related items are reviewed to determine that the plant will be placed in an acceptable status when the bypass is applied.
2. Removal of bypasses from safety related items are reviewed prior to removal.
3. Application of bypasses to safety related items is authorized by responsible personnel.

The application of safety related bypasses shall be considered a temporary measure and shall be reviewed periodically.

All required activities associated with the application, review, approval and removal shall be documented.

#### 16.7 References

The following Operational Quality Assurance Program documents are utilized to directly control inspections, tests, and operating status:

##### A. General Office Directives

1. 3ACD 3.6 Equipment Control
2. 3ACD 3.7 Work Authorization

##### B. Monticello Directives

1. 4ACD 3.6 Work Request Authorization
2. 4ACD 4.5 Equipment Control Procedures
3. 4ACD 4.8 Bypass Control
4. 4ACD 3.5 Plant Key Control

##### C. Prairie Island Directives

1. 5ACD 3.2 Work Request and Work Request Authorization
2. 5ACD 3.9 Bypass Control
3. 5ACD 3.10 Equipment Control Procedures

#### 17.0 Nonconforming Materials, Parts or Components

##### 17.1 General Requirements

Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures for identification, documentation, segregation, disposition and notification to affected organizations.

Nonconformance items shall be reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures.

##### 17.2 Receipt Inspection

Measures shall be established which assure that safety related material, supplies, equipment and components are inspected to determine that they conform to specified requirements of pertinent procurement documents upon receipt at the plant site. Provisions shall be made for identifying nonconforming items and for segregation of nonconforming items. The absence of required documentation or deficient documentation shall constitute nonconformance.

Nonconforming items shall not be used to fulfill a safety related function until the deficiency is satisfactorily resolved.

#### 17.3 Maintenance Inspection

Equipment, components or parts found nonconforming in a manner that could significantly affect its ability to fulfill its safety function shall be identified as a nonconforming item and shall be segregated.

Nonconforming items shall not be used until the deficiency is satisfactorily resolved.

#### 17.4 Disposition of Nonconforming Items

Measures shall be established which assure that nonconforming items are disposed of in a manner which prohibits their inadvertent use or installation. Provisions shall be made for reviewing the nonconformance and correcting deficiencies by repair or rework if appropriate.

Normally, nonconforming safety items shall not be installed prior to satisfactory resolution of outstanding deficiencies. In exceptional cases nonconforming items may be installed provided specific action is taken, which assures the item is not utilized to fulfill a safety function, prior to installation of the item.

#### 17.5 References

The following Operational Quality Assurance Program documents are utilized to control nonconforming materials, parts or components:

##### A. General Office Directives

1. 1ACD 5.4 Material Storage
2. 3ACD 6.3 Material Storage

##### B. Monticello Directives

1. 4ACD 9.1 Receiving Process
2. 4ACD 9.3 Control of Nonconforming Items

##### C. Prairie Island Directives

1. 5ACD 8.1 Receiving Process
2. 5ACD 8.4 Control of Nonconforming Items

#### 18.0 Corrective Action

##### 18.1 General Requirements

Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.



The identification of the condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management.

#### 18.2 Operating Occurrences & Events

Measures shall be established which assure that operating occurrences and events that could have a significant safety effect are investigated, reviewed and reported as required by the Technical Specifications. Such measures shall assure that appropriate corrective action is taken and that the event or occurrence is reported to responsible levels of management. Corrective action includes provisions which preclude recurrence.

#### 18.3 Administrative Control Deficiencies

Measures shall be established which assure that significant deficiencies noted in the conduct of Administrative Control audits are identified and reported to those responsible for the activity and to appropriate levels of management. These measures shall include corrective action designed to preclude repetition of the deficiencies identified and verification of implementation.

#### 18.4 References

The following Operational Quality Assurance Program documents are utilized to control corrective action:

##### A. General Office Directives

1. 1ACD 2.2 Audits
2. 1ACD 2.3 Reporting of Quality Assurance Status
3. 1ACD 3.2 Plant Operation
4. 2ACD 2.2 Audits
5. 2ACD 2.3 Reporting of Quality Assurance Status
6. 2ACD 3.2 Plant Operation
7. 2ACD 7.1 Plant Operation Review & Audit
8. 3ACD 2.2 Audits
9. 3ACD 2.3 Reporting of Quality Assurance Status
10. 3ACD 3.10 Operating Occurrences & Events

B. Monticello Directives

1. 4ACD 2.2 Reporting of Quality Assurance Status
2. 4ACD 3.9 Operating Occurrences and Events
3. 4ACD 3.12 Control of Nonconforming Activities

C. Prairie Island Directives

1. 5ACD 2.2 Internal Audits
2. 5ACD 2.3 Reporting of Quality Assurance Status
3. 5ACD 3.6 Investigation of Abnormal Occurrences<sup>(1)</sup>
4. 5ACD 3.7 Investigation of Unusual Events<sup>(1)</sup>

19.0 Quality Assurance Records

19.1 General Requirements

Sufficient records shall be maintained to furnish evidence of activities affecting quality. These records shall include at least the following: Operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance and material analysis. The records shall also include closely related data such as qualifications of personnel, procedures and equipment.

Inspection and test records shall, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability and the action taken in connection with any deficiencies noted. Records shall be identifiable and retrievable.

Requirements shall be established concerning record retention, such as duration, location and assigned responsibility which are consistent with applicable regulatory requirements.

19.2 Operating Records

Measures shall be established which assure that the following records as they apply to plant operation are generated and retained as required by the Technical Specifications or other regulatory requirements.

1. Reactor power level history
2. Nuclear fuel exposure history
3. Safety related operational tests
4. Safety operating related procedure history
5. Safety related periodic operational tests and inspections

6. Required operational reviews and approvals
7. Shift supervisory and reactor logs
8. Personnel radiation exposure records
9. Radioactive release records
10. Required Transient or Operating Cycling Records
11. Reportable Occurrence records
12. Radioactive shipment records
13. Plant radiation and contamination survey records
14. Review Committee records

#### 19.3 Plant Modification Records

Measures shall be established which assure that records are generated and retained adequate to reconstruct plant modifications that are safety related. Such records shall include the following documents pertaining to the modification where appropriate:

1. Modification description
2. Safety evaluation
3. Required reviews and approvals
4. Procurement documentation
5. Detailed design description
6. Required analysis and test reports
7. Document and procedure revision
8. Required installation procedures
9. Required personnel qualifications

#### 19.4 Plant Maintenance Records

Measures shall be established which assure that records pertaining to maintenance of plant safety related structures, equipment and components are generated and retained. Such records shall include the following:

1. Preventive Maintenance Records

2. Corrective Maintenance Records
3. Calibration Records

19.5 Personnel Qualification Records

Measures shall be established which assure personnel qualification records are generated and retained. Such records shall include the following:

1. Training and qualification of personnel as required by 10CFR55.
2. Training and qualification of personnel who perform special processes.
3. Radiation protection training and qualification.
4. Participation in required training programs.

19.6 Procurement Records

Measures shall be established which assure that safety related procurement documents and associated documents are generated, retained and are retrievable.

19.7 Surveillance Test Records

Measures shall be established which assure that records associated with Surveillance Testing including Inservice Inspections, are gathered and retained. Such records shall include, as appropriate, schedules, test or inspection procedures, personnel qualifications, required reviews and approvals and test or inspection results.

19.8 Audit Reports

Measures shall be established which assure records pertaining to audits of quality activities shall be gathered and retained. These records shall include audit schedules, audit procedures, audit reports, and associated followup actions.

19.9 Record Retention

Measures shall be established which assure that record retention requirements are identified for each required record. Such retention requirements shall assure compliance with pertinent Technical Specifications or other regulatory requirements.

19.10 References

The following Operational Quality Assurance Program documents are utilized for controlling required records:

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A. General Office Directives

1. 1ACD 3.5 Plant Records
2. 2ACD 3.3 Plant Records
3. 3ACD 3.5 Records Management
4. 3ACD 2.5 Quality Section Records

B. Monticello Directives

1. 4ACD 3.8 Records Management

C. Prairie Island Directives

1. 5ACD 3.4 Records Management

20.0 Audits

20.1 General Requirements

A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the Quality Assurance Program and to determine the effectiveness of the program. The audits shall be performed in accordance with written procedures or checklists by appropriately trained personnel not having direct responsibility in the areas being audited.

Audit results shall be documented and reviewed by management having responsibility in the area audited. Followup action, including re-audit of deficient areas, shall be taken where indicated.

20.2 Required Audits

Measures shall be established which assure that the provisions of each Directive issued within the Operational Quality Assurance Program are audited periodically. In addition, an overall audit shall be performed periodically which determines the adequacy of the program with respect to 10CFR50 Appendix B requirements. This overall audit shall be performed by an organization other than that responsible for administration or implementation of the program.

20.3 Audit Schedules

Required audits shall be performed each year except that this time period may be extended to not more than two years provided such extensions are justified based upon past experience. Special audits may be scheduled on the initiative of the Operational Quality Assurance Section based upon suspected or known deficiencies or as directed by management.

Appropriate audit schedules shall be prepared each year.

#### 20.4 Audit Procedures

Required audits shall be performed in accordance with appropriate audit procedures. Checklists may be used as audit procedures or in conjunction with audit procedures where appropriate. Such procedures shall include provisions for inspection of each provision of associated Directives. Selected Directive provisions may be omitted based upon past experience.

Special audits shall be performed in accordance with audit procedures or checklists appropriate for that particular audit.

#### 20.5 Audit Reports

Reports of the results of each audit shall be prepared. These reports shall include a description of the area audited, identification of individuals responsible for implementation of the audited provisions and for performance of the audit, identification of deficient areas, and recommended corrective action as appropriate.

Audit reports shall be distributed to the appropriate management level and to those individuals responsible for implementation of audited provisions.

#### 20.6 Non-Conformance

Measures shall be established which assure that deficiencies identified by audits or other means are resolved. These measures shall include notification of the individual responsible for the deficiency, recommended corrective action, and verification of satisfactory resolution.

#### 20.7 References

The following Operational Quality Assurance Program documents are utilized to control audits:

##### A. General Office Directives

1. 1ACD 2.2 Audits
2. 2ACD 2.2 Audits
3. 3ACD 2.2 Audits

##### B. Monticello Directives

1. 4ACD 3.7 Internal Audits
2. 4ACD 3.12 Control of Nonconforming Activities

##### C. Prairie Island Directives

1. 5ACD 2.2 Internal Audits

\*NOTES: (1) These Directives pertain to Reportable Occurrences