

**ATTACHMENT 3**

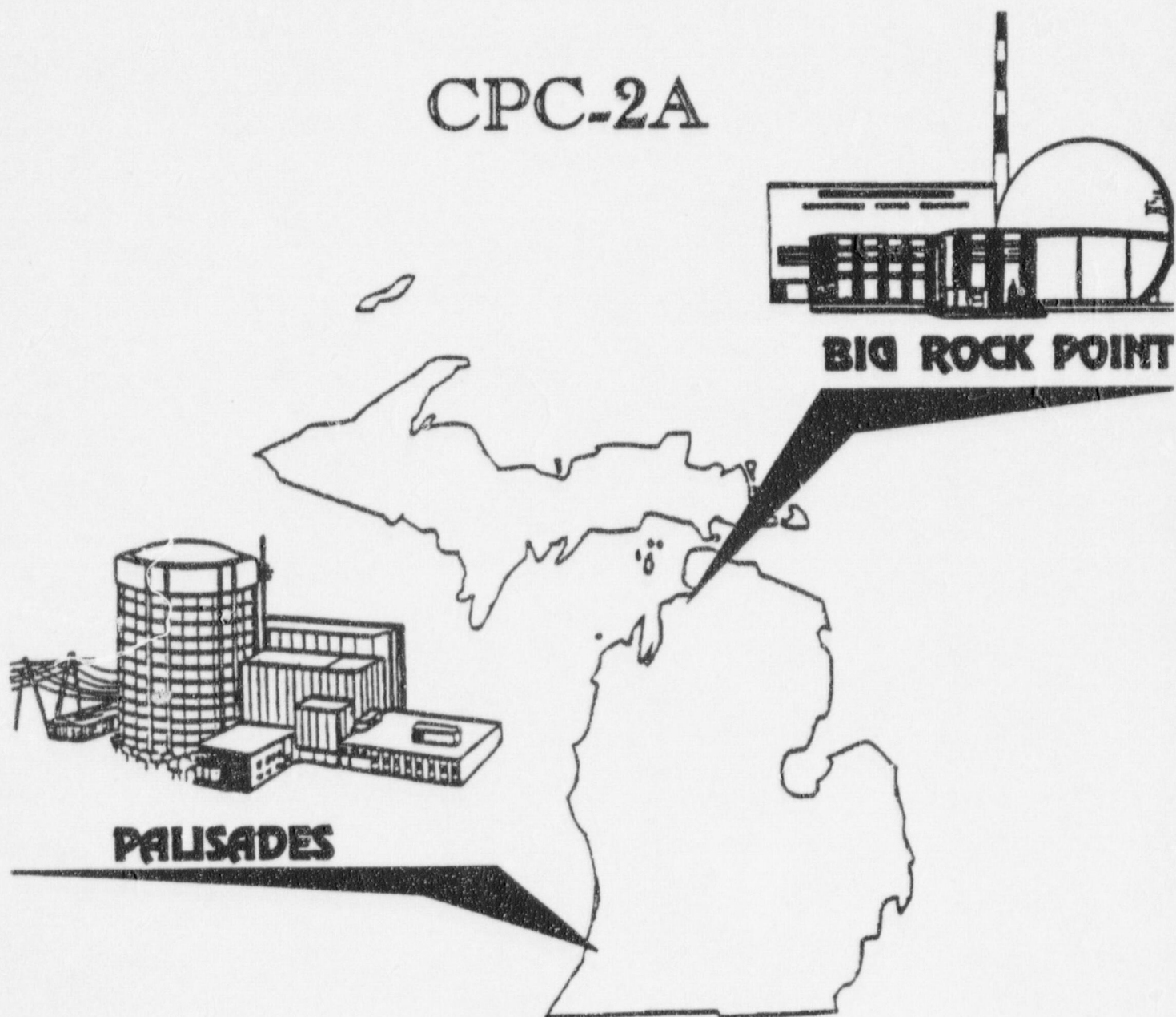
**CONSUMERS ENERGY COMPANY**  
BIG ROCK POINT PLANT  
DOCKET 50-155  
PALISADES PLANT  
DOCKET 50-255

**Revision 18 of CPC-2A**

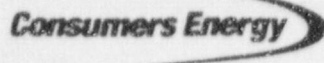
84  
Pages

Quality  
Program Description  
for  
Operational Nuclear Power Plants

CPC-2A







A CMS Energy Company

200 West Main Street  
Ann Arbor, MI 48106-2027

Tel: 313 788 1111  
Fax: 313 788 0100

**Michael G. Morris**  
President and  
Chief Executive Officer

June 6, 1997

SUBJECT: STATEMENT OF RESPONSIBILITY AND AUTHORITY REGARDING THE  
CONSUMERS ENERGY PROGRAM FOR OPERATIONAL NUCLEAR POWER  
PLANTS

As President and Chief Executive Officer of Consumers Energy, I have the ultimate management authority for the Consumers Energy Quality Program Description for Operational Nuclear Power Plants. The Quality Program Description complies with the quality assurance requirements contained in Appendix B of 10 CFR 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants" and responds to the additional guidance contained in ANSI N18.7, and to the ANSI N45.2 Series of Standards and corresponding Regulatory Guides within the context of applicability imposed by N18.7. The Quality Program Description for Operational Nuclear Power Plants outlines the actions that are implemented during the operational phase including fueling, testing, operation, refueling, procurement, maintenance, repair, and modification design and construction of the safety-related portions of the nuclear power plants.

I have delegated responsibility for establishing, maintaining and implementing the Quality Program Description through the Executive Vice President and Chief Operating Officer-Electric to the Sr. Vice President, Nuclear, Fossil and Hydro Operations. I have delegated selected portions of the Quality Program to the Vice President, Electric Transmission and Distribution; Vice President, Information Technology and Operations Services Division; and through a Vice Chairman of Consumers Energy to the Vice President and Secretary. This Quality Program Description describes the Consumers Energy organizations responsible for implementation.

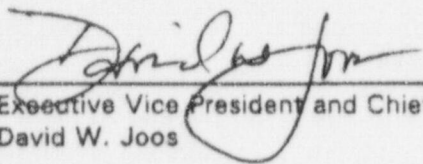
The Quality Program Description contains mandatory requirements which must be implemented and enforced by all responsible organizations and individuals.

*Michael G. Morris*

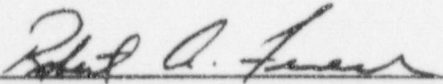
QUALITY PROGRAM DESCRIPTION  
FOR  
OPERATIONAL NUCLEAR POWER PLANTS

REVISION 18

APPROVED BY:

  
Executive Vice President and Chief Operating Officer - Electric  
David W. Joos

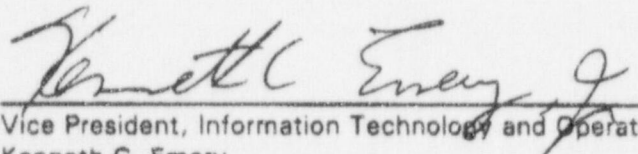
5/30/97  
Date

  
Sr. Vice President, Nuclear, Fossil, and Hydro Operations  
Robert A. Fenech

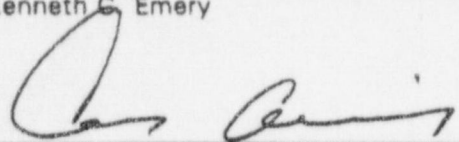
5/30/97  
Date

  
Vice President, Electric Transmission and Distribution  
Carl L. English

05/30/97  
Date

  
Vice President, Information Technology and Operations Services  
Kenneth G. Emery

6/4/97  
Date

  
Vice President and Secretary  
Thomas A. McNish

5/30/97  
Date

QUALITY PROGRAM DESCRIPTION  
FOR  
OPERATIONAL NUCLEAR POWER PLANTS  
  
CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	Statement of Responsibility and Authority	i
	Approval Page	ii
	Contents	iii
1.0	ORGANIZATION . . . . .	1
2.0	QUALITY PROGRAM . . . . .	10
3.0	DESIGN CONTROL . . . . .	14
4.0	PROCUREMENT DOCUMENT CONTROL . . . . .	17
5.0	INSTRUCTIONS, PROCEDURES AND DRAWINGS . . . . .	19
6.0	DOCUMENT CONTROL . . . . .	22
7.0	CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES . . . . .	24
8.0	IDENTIFICATION AND CONTROL OF ITEMS . . . . .	26
9.0	CONTROL OF SPECIAL PROCESSES . . . . .	27
10.0	INSPECTION . . . . .	28
11.0	TEST CONTROL . . . . .	31
12.0	CONTROL OF MEASURING AND TEST EQUIPMENT . . . . .	33
13.0	HANDLING, STORAGE AND SHIPPING . . . . .	35
14.0	INSPECTION, TEST AND OPERATING STATUS . . . . .	36
15.0	NONCONFORMING MATERIALS, PARTS OR COMPONENTS . . . . .	37
16.0	CORRECTIVE ACTION . . . . .	39
17.0	QUALITY RECORDS . . . . .	40
18.0	AUDITS . . . . .	42



APPENDIX A .....	44
APPENDIX B .....	71
APPENDIX C .....	74
APPENDIX D .....	77
APPENDIX E .....	78

FIGURE

1 Consumers Energy Corporate Organization .....	9
---	---

## 1.0 ORGANIZATION

### 1.1 REQUIREMENTS

Consumers Energy is responsible for establishing and implementing the Quality Program, as described herein, for the operational phase of its nuclear power plants. Although authority for development and execution of some parts of the program is delegated to others, such as contractors and consultants, Consumers Energy retains overall responsibility.

This section of the Quality Program Description (QPD) identifies the Consumers Energy organizations responsible for activities affecting the quality of safety-related nuclear power plant structures, systems and components and describes the authority and duties assigned to them. It addresses responsibilities for attaining quality objectives; for establishing and maintaining the Quality Program; and for assessing the performance of activities affecting the quality of safety-related items. The control of this Quality Program Description is the responsibility of the Nuclear Performance Assessment Department.

Nuclear Performance Assessment Department (NPAD) functions (audits, surveillances, and independent safety reviews) are performed by personnel within formally designated organizational units that report to the Manager, Nuclear Performance Assessment or members of other organizations as selected by the Manager, Nuclear Performance Assessment. The reporting level of the Nuclear Performance Assessment organization affords sufficient authority and organizational freedom, including sufficient independence from the cost and schedule impacts of Nuclear Performance Assessment organization actions, to enable people in that organization to identify quality problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
1.2.1	2a
1.2.2	2g
1.2.2.c	2, 2b, 2c

### 1.2 IMPLEMENTATION

#### 1.2.1 Source of Authority

The President and Chief Executive Officer (see Figure 1, Company Organization Chart) of Consumers Energy is responsible for safe operation of Consumers Energy nuclear power plants. Authority and responsibility for establishing and implementing the Quality Program for plant operations, maintenance and modifications is delegated through the Executive Vice President and Chief Operating Officer - Electric to the Senior Vice President - Nuclear, Fossil, and Hydro Operations. This delegation is formalized in a STATEMENT OF RESPONSIBILITY AND AUTHORITY signed by the President and Chief Executive Officer. Other quality-related functions are provided by other organizations as described herein.

1.2.2 Responsibility for Attaining Quality Objectives at the Nuclear Plants

The Senior Vice President - Nuclear, Fossil, and Hydro Operations (NFHO) is responsible to the Executive Vice President and Chief Operating Officer - Electric for operation and maintenance of Consumers Energy nuclear power plants. Managers who report to the Vice President, NFHO, are responsible for directing the performance of activities that affect safe plant operation and/or safety-related functions of structures, systems and components of the operating nuclear power plants in accordance with Quality Program requirements.

- a. The Palisades Plant Site Vice President (see Figure 1) is responsible to the Senior Vice President, NFHO for operation and maintenance of the nuclear power plant in such a manner as to achieve compliance with Plant licenses, applicable regulations and the Quality Program. The Site Vice President delegates to appropriate managers and staff personnel in his organization responsibility for carrying out applicable controls required by the Quality Program. Quality Program activities performed on the authority of the Site Vice President include:

Qualification of plant operating, inspection, maintenance and engineering personnel, including certification of inspection personnel.

Preparation, review and approval of procedures and instructions.

Modifying components, including procurement, installation, inspection and testing activities.

Authorizing use of secondary calibration standards whose accuracy is equal to that of equipment being calibrated, and assuring that such use cannot result in operation outside Technical Specifications limits.

Maintaining Echelon III calibration facilities for Portable and Laboratory Measuring and Test Equipment (PL-M&TE) and Health Physics PL-M&TE (HPPL-M&TE).  
Calibration/maintenance of installed plant instrumentation.

Maintaining a calibration recall system.

Maintaining a Master List for plant-owned PL-M&TE.

Performing start-up and operational testing, such as pre-critical and criticality tests, low-power, power ascension and plant tests, and surveillance testing.

Maintaining equipment status control.

Maintaining required controls over chemical standards and reagents.

Developing, maintaining and implementing site emergency plan.

Conducting a water chemistry program in accordance with technical specifications.

Stopping unsatisfactory work to control further processing, delivery or installation of nonconforming materials or items.



Plant site inspection program, including inspection of maintenance, testing and fuel handling.

Assuring that nonconforming items are identified, segregated and dispositioned.

Procurement of nuclear fuel and associated services, including source verification at fuel supplier facilities, fuel inspection upon delivery and review of fuel supplier quality-related documentation

Reactor engineering such as accident-transient and physics analysis of reloads, reactor core and nuclear fuel design and core thermal-hydraulic and nuclear support of plant modifications and operations.

Development and utilization of nuclear plant probabilistic safety assessment models to evaluate safety and plant reliability improvement

Establishing, implementing and documenting the training of nuclear operations and technical support personnel, including Quality Program indoctrination and training.

Conducting the inservice inspection program in accordance with technical specifications and State of Michigan rules.

Performing reviews to advise the Site Vice President on matters related to nuclear safety, as specified in Appendix B, Plant Review Committee.

Accomplishing plant licensing activities including maintaining licensing documents up-to-date, interfacing with the NRC, accomplishing and/or tracking licensing commitments and coordinating internal action on NRC bulletins, generic letters, etc.

Providing determination of NRC reportability for corrective action documents.

Operating experience reviews including NRC Information Notices.

Functioning as the design and configuration control authority for compliance of plant modifications and design changes to existing plant design criteria. This includes preparing, reviewing and approving changes to plant engineering/design documents.

Performing the engineering, procurement, construction, inspection and testing associated with generating plant modification projects as assigned.

Providing, as requested, technical expertise and review capability to Nuclear Plants in the areas of metallurgy, special processes, coatings, electrical, mechanical and civil-structural engineering and application of codes and standards.

Preparation, review and approval of Q-list updates.

Performing analytical studies to appraise the adequacy of electrical supply to safety-related equipment in nuclear power plants from the principal power supply facilities of the transmission network and onsite power supply.

Procurement, including preparation, reviews and approval of purchase requests for spares, replacement items, consumables, and materials, items and services and submittal of purchase requests to Purchasing. Planning and execution of vendor source surveillance or inspection, receiving inspection, and review of supplier quality-related documentation, as well as vendor surveys for urgent procurements.

Providing for storage and protection of purchased materials and items and items awaiting disposition implementation after removal from service, assuring preservation of identification.

Developing, maintaining and implementing security and fire protection plans.

Maintaining the Records Management System including required retention, protection and retrievability. This includes collecting, storing, maintaining, distributing and controlling plant engineering/design documents.

- b. The Big Rock Point Plant General Manager (see Figure 1) is responsible to the Senior Vice President NFHO for operation and maintenance of the nuclear power plant in such a manner as to achieve compliance with Plant licenses, applicable regulations and the Quality Program. The Plant General Manager delegates to appropriate managers and staff personnel in his organization responsibility for carrying out applicable controls required by the Quality Program. Quality Program activities performed on the authority of the Plant General Manager include:

Qualification of plant operating, inspection and maintenance personnel, including certification of inspection personnel.

Preparation, review and approval of plant procedures and instructions.

Functioning as the plant design and configuration control authority for compliance of plant modifications and design changes to existing plant design criteria.

Modifying components, including procurement, installation, inspection and testing activities when assigned by the Plant General Manager.

Authorizing use of secondary calibration standards whose accuracy is equal to that of equipment being calibrated, and assuring that such use cannot result in operation outside Technical Specifications limits.

Maintaining Echelon III calibration facilities for Portable and Laboratory Measuring and Test Equipment (PL-M&TE) and Health Physics PL-M&TE (HPPL-M&TE).  
Calibration/maintenance of installed plant instrumentation.

Maintaining a calibration recall system.

Maintaining a Master List for plant-owned PL-M&TE.

Performing start-up and operational testing, such as precritical and criticality tests, low-power, power ascension and plant tests, and surveillance testing.

Maintaining equipment status control.

Maintaining required controls over chemical standards and reagents.

Conducting a water chemistry program in accordance with technical specifications.

Stopping unsatisfactory work to control further processing, delivery or installation of nonconforming materials or items.

Plant site inspection program, including inspection of maintenance, testing and fuel handling.

Preparation, review, and approval of Q-list updates.

Assuring that nonconforming items are identified, segregated and dispositioned.

Reactor engineering such as accident-transient and physics analysis of reloads, reactor core and nuclear fuel design and core thermal-hydraulic and nuclear support of plant modifications and operations.

Establishing, implementing and documenting the training of nuclear operations and technical support personnel, including Quality Program indoctrination and training.

Development and utilization of nuclear plant probabilistic safety assessment models to evaluate safety and plant reliability improvement.

Procurement, including preparation, reviews and approval of purchase requests for spares, replacement items, consumables, and materials, items and services and submittal of purchase requests to Purchasing. Planning and execution of vendor source surveillance or inspection, receiving inspection, and review of supplier quality-related documentation, as well as vendor surveys for urgent procurements.

Providing for storage and protection of purchased materials and items and items awaiting disposition implementation after removal from service, assuring preservation of identification.

Accomplishing plant licensing activities including maintaining licensing documents up-to-date, interfacing with the NRC, accomplishing and/or tracking licensing commitments and coordinating internal action on NRC bulletins, generic letters, etc.

Providing evaluation, processing and status reporting for assigned corrective action documents, including determination of NRC reportability.

Operating experience reviews including NRC Information Notices.

Performing the engineering, construction, inspection and testing associated with generating plant modification projects as assigned.



Conducting the inservice inspection program in accordance with technical specifications and State of Michigan rules.

Developing, maintaining and implementing security, fire protection and emergency plans.

Performing reviews to advise the Plant General Manager on matters related to nuclear safety, as specified in Appendix B, Plant Review Committee.

### 1.2.3 Responsibilities of the Nuclear Performance Assessment Department

The Manager, Nuclear Performance Assessment Department, (see Figure 1) is responsible to the Senior Vice President, NFHO, for:

Assessment of the effectiveness of the Nuclear Operations Quality Program.

Performance of the offsite safety review functions for the nuclear power plants as described in Appendix C, Independent Safety Review.

Supplier surveys and evaluation including review/approval of supplier QA programs, and maintenance of the Nuclear Approved Suppliers List.

Preparation, review, approval and implementation of departmental procedures governing nuclear assessment activities.

Assessment of nuclear safety performance as described in the Technical Specifications.

Assuring that assessments are done by personnel not directly responsible for the work being performed.

Recommending to the Site Vice President, the Plant General Manager, or the Senior Vice President NFHO that a plant be shut down if such action appears necessary

Assessment programs (plant sites and Corporate Office), including follow-up on corrective action for audit findings.

Review of performance trends associated with nuclear plant activities including corrective actions.

Analysis of new and/or changed regulatory direction, codes and standards to determine their effect on the Quality Program.

Maintenance of the Quality Program Description for Operational Nuclear Power Plants.

Reporting audit findings relative to follow-up on corrective actions and the effectiveness of the Quality Program to Consumers Energy Management.

Maintenance/operation, processing and status reporting of the corrective action system (Palisades only).

Facilitation of Self-Assessment and Quality Verification Programs (Palisades only).

In order to implement these responsibilities, the Manager, NPAD, is provided with "Stop Work" authority whereby he can suspend any quality related activity or process which may, in his opinion, adversely affect public safety or the safe operation of Consumers Energy nuclear plants. A Stop Work order that would result in plant shutdown is given as a recommendation - NRC licensed operating staff are responsible for determining and carrying out the safest course of actions.

The Manager, Nuclear Performance Assessment has no other primary duties or responsibilities unrelated to Nuclear Performance Assessment that would prevent his attention to Nuclear Performance Assessment matters, is sufficiently free from schedule and cost pressures to give appropriate weight to quality considerations in his decisions and recommendations, and has direct access to high enough levels of Management to obtain resolution of quality problems.

#### 1.2.4 Responsibilities of the Equipment Services Department

The Manager, Equipment Services provides electrical, rotating and stationary equipment expertise, including developing and qualifying procedures for welding and heat treating.

#### 1.2.5 Responsibility for Attaining Quality Objectives Outside Nuclear, Fossil, and Hydro Operations

Certain functions that constitute part of the Nuclear Quality Program are performed by Consumers Energy organizational units outside the Nuclear, Fossil and Hydro Operations Department. Engineering and design tasks executed in support of plant activities are subject to review and acceptance by the associated plant organization responsible for that activity (i.e., the design authority).

- a. The Manager, Electric System Operations (see Figure 1) is responsible through the Vice President, Electric Transmission and Distribution to the Executive Vice President and Chief Operating Officer - Electric for determining settings for electrical protective systems and relay control schemes, and for design, review and recommending changes to electrical protective schemes and associated settings.
- b. The Executive Manager, Fuels & Power Transactions is responsible to the Executive Vice President and Chief Operating Officer - Electric for maintaining the Records Management System including required retention, protection and retrievability. This includes collecting, storing, maintaining, distributing and controlling plant engineering/design documents (Big Rock only). This excludes Big Rock Safeguards information documents, which are maintained at Big Rock. The accuracy, quality, and correctness of Big Rock documents in the Records Management System are the responsibility of Big Rock Point.
- c. The Manager, Production Services (see Figure 1) is responsible through the Vice President Electric Transmission and Distribution to the Executive Vice President and Chief Operating Officer - Electric for operating the Skill Centers including the training, and qualifying of personnel and equipment for welding operations.
- d. The Corporate Records Administrator (see Figure 1) is responsible through the Vice President and Secretary for microfilming of specified quality records and plant engineering/design documents.

- e. The Manager, Environmental and Technical Services (E&TS) is responsible, through the Vice President, Information Technology and Operations Services to the President and Chief Executive Officer for:

Maintaining the Company's Echelon II calibration facility for calibrating reference and secondary standards and general usage portable and laboratory measuring and test equipment.

Controlling the calibration recall system for Portable and Laboratory M&TE owned by E&TS, and other departments, as requested.

Maintaining a Master PL-M&TE List for E&TS PL-M&TE and for other departments, as requested.

Providing a PL-M&TE Inventory List for Nuclear plants.

Providing chemistry support to Nuclear plants, as requested.

Preparing, reviewing, approving and obtaining additional reviews and approvals if required, of purchase requests for services, equipment and consumables, and submitting such requests to purchasing for procurement action.

Conducting performance tests on materials, equipment and systems when requested.

Performing nondestructive examination, and controlling/maintaining NDE equipment.

Providing qualified NDE procedures and equipment and NDE personnel.

Providing chemical and metallurgical analytical services.

Providing necessary corrective action processing and status reporting for assigned corrective action documents.

- f. The Manager, Electric Services is responsible, through the Vice President, Electric Transmission and Distribution to the Executive Vice President and Chief Operating Officer - Electric for testing and maintaining electrical protective devices, performing design verification testing associated with electrical protective schemes, devices and application of associated settings.



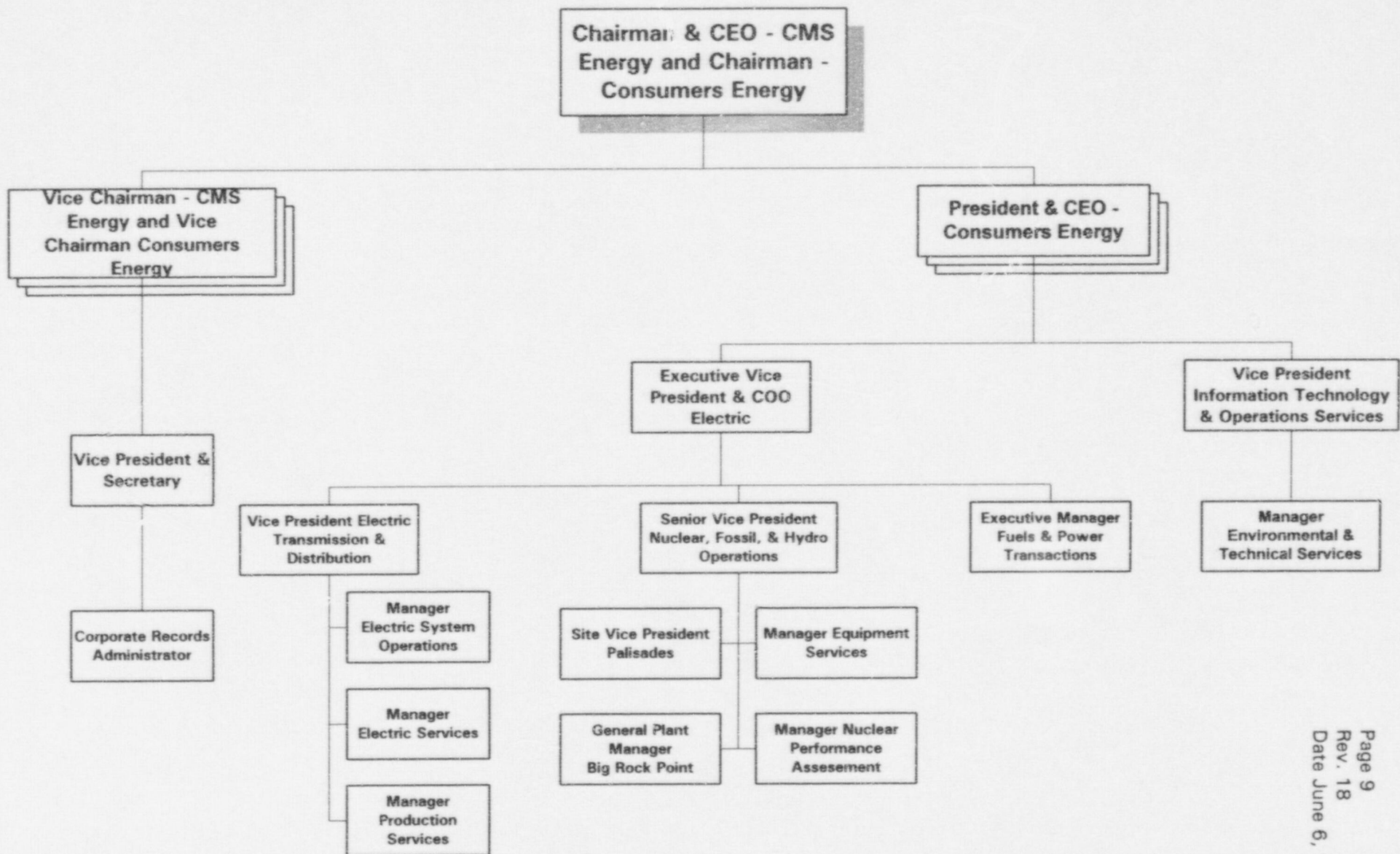


Figure 1 - Company Organizational Chart for Operational Nuclear Power Plants

## 2.0 QUALITY PROGRAM

### 2.1 REQUIREMENTS

Policies that define and establish the Consumers Energy Quality Program for Operational Nuclear Power Plants are stated in the individual sections of this document. The program is implemented through procedures and instructions responsive to provisions of the Quality Program Description and will be carried out for the life of each plant.

Quality controls apply to activities affecting the quality of safety-related structures, systems and components, to an extent based on the importance of those structures, systems, or components to safety. Such activities are performed under suitably controlled conditions, including the use of appropriate equipment, maintenance of proper environmental conditions, assignment of qualified personnel and assurance that all applicable prerequisites have been met.

Quality Program status, scope, adequacy and compliance with 10 CFR 50, Appendix B are regularly reviewed by Consumers Energy Management through reports, meetings and review of audit results. A preplanned and documented assessment of the nuclear safety performance is conducted as described in Appendix C.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
2.2.3	21a, 21.b
2.2.5	19a
2.2.6	1, 19, 21a, 21b
2.2.9	2j, 4a, 5a, 5b, 6a, 7b, 10a, 11a, 12a, 12b, 12c, 12d, 13a, 17e
2.2.10	2e, 2f

### 2.2 IMPLEMENTATION

2.2.1 The President of Consumers Energy, as Chief Executive Officer, has stated in a formal STATEMENT OF RESPONSIBILITY AND AUTHORITY, signed by him, that it is corporate policy to comply with the provisions of applicable legislation and regulations pertaining to quality assurance for nuclear power plants as defined by 10 CFR 50, Appendix B. The statement makes this Quality Program Description and the associated implementing procedures and instructions mandatory and requires compliance by all responsible organizations and individuals. It identifies the Management positions in the Company vested with responsibility and authority for implementing the Program and assuring its effectiveness.

2.2.2 The Quality Program at Consumers Energy consists of controls exercised by organizations responsible for attaining quality objectives and by organizations responsible for assurance functions (see Section 1.0, ORGANIZATION).

2.2.3 The affectivity and applicability of this Quality Program Description are as follows:

- a. For Big Rock Point and Palisades, the Quality Program Description became effective on April 1, 1982, with full implementation on January 1, 1983.

- b. The Quality Program described in this Quality Program Description is intended to apply for the life of Consumers Energy's nuclear power plants.
- c. The Quality Program applies to activities affecting the quality of safety-related structures, systems, components and related consumables during plant operation, maintenance, testing and all modifications. Those activities having a direct impact on safety-related items shall be controlled. Safety-related structures, systems, components and related consumables are identified in Q-Lists, which are developed and maintained for each plant in accordance with the criteria of Regulatory Guide 1.29 as clarified by Items No. 20a and No. 20b in Part 2 of Appendix A to this Quality Program Description.

- 2.2.4 This Quality Program Description, organized to present the Consumers Energy Quality Program for Operational Nuclear Power Plants in the order of the 18 criteria of 10 CFR 50, Appendix B, states Consumers Energy requirements for each of the criteria and describes how the controls pertinent to each are carried out. Any changes made to this Quality Program Description that do not reduce the commitments previously accepted by the NRC must be submitted to the NRC at least annually as specified by 10 CFR 50.71.e. Any changes made to this Quality Program Description that do reduce the commitments previously accepted by the NRC must be submitted to the NRC and receive NRC approval prior to implementation in accordance with the requirements of 10 CFR 50.54.

The program described in this Quality Program Description will not be changed in any way that would prevent it from meeting the criteria of 10 CFR 50, Appendix B.

- 2.2.5 Documents used for implementing the provisions of the Quality Program Description include the following:
- a. Administrative procedures specify the standard methods of accomplishing operational phase activities. Because the Quality Program is an integral part of the operational phase activities, the methods for implementing Quality Program controls are integrated into these documents.
  - b. When Contractors perform work under their own quality assurance programs, these programs are reviewed for compliance with the applicable requirements of 10 CFR 50, Appendix B and the contract, and are approved by Consumers Energy prior to the start of work.
  - c. Applicable elements of the operations Quality Program are applied to emergency plans, security plans, radiation and fire protection plans for Consumers Energy nuclear power plants. These plans describe quality controls applicable to associated equipment and activities.

- 2.2.6 Provisions of the Quality Program for Operational Nuclear Power Plants apply to activities affecting the quality of safety-related structures, systems, components and related consumables.

Appendix A to this Quality Program Description lists the ANSI Standards and Regulatory Guides to which Consumers Energy commits. Appendix A also describes necessary exceptions and clarifications to the requirements of those documents. The scope of the program and the extent to which its controls are applied are established as follows:



- a. Consumers Energy uses the criteria specified in Regulatory Guides 1.26 and 1.29 in engineering evaluation of an item's function in relation to safe operation and shutdown to identify structures, systems and components to which the Quality Program applies (See Appendix A).
- b. This identification by engineering personnel results in the classification of equipment as either safety related or non-safety related, and the inclusion of this classification in an equipment data base. This data base is available for inquiry by individuals involved in plant operation. The classification of structures, systems and consumables is also identified, documented, and controlled.
- c. The extent to which controls specified in the Quality Program are applied to items is determined for each item considering its relative importance to safety. Such determinations are based on data in such documents as the plant safety analysis, plant Technical Specifications and the FSAR/FHSR (See Appendix A).

2.2.7 Activities affecting the quality of safety-related items are accomplished under controlled conditions. Preparations for such activities include confirmation that prerequisites have been met, such as:

- a. Assigned personnel are qualified.
- b. Work has been planned to the proper revisions of applicable engineering and/or technical specifications.
- c. Specified equipment and/or tools, if any, are on hand to be used.
- d. Materials and items are in an acceptable status.
- e. Systems or structures on which work is to be performed are in the proper condition for the task.
- f. Authorized current instructions/procedures for the work are available for use.
- g. Items and facilities that could be damaged by the work have been protected, as required.
- h. Provisions have been made for special controls, processes, tests and verification methods.

2.2.8 Development, control and use of computer programs affecting nuclear power plant design and operation at Consumers Energy are subject to Quality Program design controls (see Section 3.0, DESIGN CONTROL).

2.2.9 Responsibility and authority for planning and implementing indoctrination and training are specifically designated in the Consumers Energy organization (see Section 1.0, ORGANIZATION).

- a. The training and indoctrination program provides for ongoing training and periodic refamiliarization with the Quality Program for Operational Nuclear Power Plants.

- b. Personnel who perform inspection and examination functions are qualified in accordance with requirements of Regulatory Guide 1.58, SNT TC-1A, or the ASME Code, or Section 10.2.3 of this Quality Program Description, as applicable.
- c. Personnel who lead audits are qualified in accordance with Regulatory Guide 1.146. Others are either qualified to ANSI N-5.2.23 or have detailed expertise in the area being audited.
- d. Personnel assigned duties such as special cleaning processes, welding, etc, are qualified in accordance with applicable codes, standards and regulatory guides.
- e. The training/qualification program for personnel leading audits includes provisions for retraining, reevaluation and recertification to ensure that proficiency is maintained.
- f. Training and qualification records including documentation of objectives, content of program, attendees and dates of attendance are maintained at least as long as the personnel involved are performing activities to which the training/qualification is relevant.
- g. Personnel responsible for performing activities that affect quality are instructed as to the requirements identified in applicable quality related manuals, instructions and procedures.

2.2.10 Status and adequacy of the quality program are regularly assessed by Consumers Energy Management. The following activities constitute formal elements of that assessment:

- a. Audit reports, including follow-up on corrective action accomplishment and effectiveness, are distributed to appropriate levels of Management (see Section 18.0, AUDIT).
- b. Management teams assess the nuclear safety performance as described in Appendix C. Conclusions and recommendations are reported to the Executive Vice President and Chief Operating Officer - Electric.

Corrective actions in response to recommendations are tracked in the regular corrective action tracking system (see Section 16.0, CORRECTIVE ACTION).

### 3.0 DESIGN CONTROL

#### 3.1 REQUIREMENTS

Modifications to safety-related structures, systems and components are accomplished in accordance with approved designs. Activities to develop such designs are controlled. Depending on the type of modification, these activities include design and field engineering; the performance of physics, seismic, stress, thermal, hydraulic, radiation and Safety Analysis Report (SAR) accident analyses; the development and control of associated computer programs; studies of material compatibility; accessibility for inservice inspection and maintenance; and determination of quality standards. The controls apply to preparation and review of design documents, including the correct translation of applicable regulatory requirements and design bases into design, procurement and procedural documents.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
3.1	9a, 13b
3.2.9	15a
3.2.10	13d

#### 3.2 IMPLEMENTATION

- 3.2.1 Authority and responsibility for modification activities is under the cognizance of the Nuclear Plants as described in Section 1.0, ORGANIZATION. This authority and responsibility includes the preparation, review, approval and verification of the following design documents: a) System descriptions; b) Design input and criteria; c) Drawings and specifications; and d) Engineering analyses and associated computer programs.
- 3.2.2 Errors and deficiencies in approved design documents, or in design methods (such as computer codes) that could adversely affect structures, systems and components are documented. Action is taken to assure that the errors and deficiencies are corrected.
- 3.2.3 Materials, parts and processes that are essential to safety-related functions are selected and specified, based on the requirements of applicable codes and standards or on known, successful use under similar conditions. This includes standard commercial materials, parts and processes. Alternatively, materials, parts and processes may be qualified for use through qualification testing (see Item 3.2.8). The adequacy of the selected materials, parts and processes is assured through the required design verifications or approvals.
- 3.2.4 Exceptions and waivers to or deviations from the engineering (quality) standards (i.e., the required dimensions, material properties, features and other characteristics specified for modifications) are required by procedure and by contract, when applicable, to be documented and controlled. (See, also, Section 15 concerning the approval of "repair" or "use as is" dispositions of nonconformances.)
- 3.2.5 When modifications involve design interfaces between internal or external design organizations or across technical disciplines, these interfaces are controlled. Procedures are used for the review, approval, release, distribution and revision of documents involving design interfaces to



ensure that structures, systems and components are compatible geometrically, functionally and with processes and environment. Lines of communication are established for controlling the flow of needed design information across design interfaces, including changes to the information as work progresses. Decisions and problem resolutions involving design interfaces are made by the Consumers Energy organization having responsibility for engineering direction of the design effort.

- 3.2.6 Checks are performed and documented to verify the dimensional accuracy and completeness of design drawings and specifications (i.e., the products of a design process).
- 3.2.7 Modification design document packages are reviewed by Plant Engineering personnel to assure that the documents that they contain have been prepared, verified, reviewed and approved in accordance with Company procedures and that they contain the necessary quality requirements. These requirements include the inspection and test requirements, quantitative and/or qualitative acceptance criteria and the requirements for documenting inspection and test results.
- 3.2.8 The extent of and methods for design verification are documented. The extent of design verification performed is a function of the importance of the item to safety, design complexity, degree of standardization, the state-of-the-art and similarity with previously proven designs. Methods for design verification include evaluation of the applicability of standardized or previously proven designs, alternate calculations, qualification testing and design reviews. These methods may be used singly or in combination, depending on the needs for the design under consideration.

When design verification is done by evaluating standardized or previously proven designs, the applicability of such designs is confirmed. Any differences from the proven design are documented and evaluated for the intended application.

Qualification testing of prototypes, components or features is used when the ability of an item to perform an essential safety function cannot otherwise be adequately substantiated. This testing is performed before plant equipment installation where possible, but always before reliance upon the item to perform a safety-related function. Qualification testing is performed under conditions that simulate the most adverse design conditions, considering all relevant operating modes. Test requirements, procedures and results are documented. Results are evaluated to assure that test requirements have been satisfied. Modifications shown to be necessary through testing are made, and any necessary retesting or other verification is performed. Scaling laws are established and verified, when applicable. Test configurations are clearly documented.

Design reviews are performed by multi-organizational or interdisciplinary groups or by single individuals. Criteria are established to determine when a formal group review is required and when review by an individual is sufficient.

Unless otherwise stated, the verification of design addresses all information conveyed by the design document. When the verification is limited to certain areas or features, the scope or extent and any limitations on the verification are documented.

- 3.2.9 Persons representing applicable technical disciplines are assigned to perform design verifications. These persons are qualified by appropriate education or experience but are not

directly responsible for the design. The designer's immediate supervisor may perform the verification, provided that:

- (1) He is the only technically qualified individual available, and
- (2) He has not specified a singular design approach, ruled out certain design considerations or established the design inputs for the particular design aspect being verified, and
- (3) His review is either:
  - a. Approved in advance by the supervisor's management, with documentation of the approval included in the design package, or
  - b. Controlled by a procedure which provides specific limitations regarding the types of design work that may or may not be verified by a designer's supervisor, and shall provide for clear documentation that the supervisor performed the design verification.

Independent audits by Nuclear Performance Assessment cover the frequency, effectiveness, and technical adequacy of the use of supervisors as design verifiers to guard against abuse.

- 3.2.10 When designs must be released for use before they have been fully completed or before they have been verified, the incomplete or unverified parts of the design and the hold point to which work may proceed are identified. This hold point occurs before the work becomes irreversible or before the item is relied on to perform a safety-related function. Justification for such early release is documented.
- 3.2.11 Computer codes used in design are appropriately documented, verified, certified for use and controlled. Their use is specified.
- 3.2.12 Changes to design output documents, including field changes, are controlled in a manner commensurate with that used for the original design. Such changes are evaluated for impact. Those that affect fit, form, or function are reviewed and approved by the same, or equivalent, organizations that approved the original design. Information on approved changes is transmitted to all affected organizations.

#### 4.0 PROCUREMENT DOCUMENT CONTROL

##### 4.1 REQUIREMENTS

Procurement documents for safety-related structures, systems, components and services define the characteristics of item(s) to be procured, identify applicable regulatory and industry codes/standards requirements and specify supplier quality assurance program requirements to the extent necessary to assure adequate quality.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
4.2.1	17c, 17d
4.2.3	2l, 17a, 17b
4.2.5	17d

##### 4.2 IMPLEMENTATION

- 4.2.1 Responsibilities and authorities for procurement planning and for preparation, review and approval of procurement documents are delineated in Section 1.0, ORGANIZATION.

Procurement request packages are reviewed and approved prior to submittal to the Purchasing and Materials Department. Review includes verification that the necessary quality requirements are specified.

The responsible project engineer performs bid evaluations.

- 4.2.2 Supplier selection is described in Section 7.0, CONTROL OF PURCHASED MATERIALS, EQUIPMENT AND SERVICES.

- 4.2.3 The contents of procurement documents vary according to the item(s) being purchased and its function(s) in the plant. Provisions of this Quality Program Description are considered for application to suppliers. As applicable, procurement documents include:

- a. Scope of work to be performed.
- b. Technical requirements, with applicable drawings, specifications, codes and standards identified by title, document number and revision and date, with any required procedures such as special process instructions identified in such a way as to indicate source and need.
- c. Regulatory, administrative and reporting requirements.
- d. Quality requirements appropriate to the complexity and scope of the work, including necessary tests and inspections.
- e. A requirement for a documented Quality Program, subject to Consumers Energy review and written concurrence prior to the start of work.



- f. A requirement for the supplier to invoke applicable quality requirements on subtier suppliers.
- g. Provisions for access to supplier and subtier suppliers' facilities and records for inspections, surveillances and audits.
- h. Identification of documentation to be provided by the supplier, identification of documents to be compatible with the records system, the schedule of submittals and identification of documents requiring Consumers Energy approval.

4.2.4 Trained, qualified personnel perform and document reviews of procurement request packages to assure that:

- a. Quality requirements (see 4.2.3 of this Section) are correctly stated, inspectable, and controllable.
- b. Adequate acceptance and rejection criteria are included.
- c. The procurement documents have been prepared, reviewed, and approved per the Quality Program requirements.

4.2.5 Changes to the technical or quality requirements in procurement documents are controlled in a manner commensurate with that used for the original requirements. Those that could affect fit, form, function or the necessary assurance of quality are reviewed and approved by the same, or equivalent, organizations that approved the original procurement request packages.

## 5.0 INSTRUCTIONS, PROCEDURES AND DRAWINGS

### 5.1 REQUIREMENTS

Activities affecting the quality of safety-related structures, systems and components are accomplished using instructions, procedures and drawings appropriate to the circumstances which include acceptance criteria for determining if an activity has been satisfactorily completed.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
5.1	9a, 13b
5.2.8	2r, 2s, 8a
5.2.14	6b

### 5.2 IMPLEMENTATION

The authority and responsibility for performing activities affecting the quality of safety-related structures, systems and components are assigned as described in Section 1.0, ORGANIZATION. Management personnel assigned these responsibilities assure that the instructions, procedures and drawings necessary to accomplish the activity are prepared and implemented.

Instructions, procedures and drawings incorporate (1) a description of the activity to be accomplished and (2) appropriate quantitative (such as tolerances and operating limits) and/or qualitative (such as workmanship standards) acceptance criteria sufficient to determine that the activity has been satisfactorily accomplished.

Temporary procedures may be issued to provide management instructions which have short-term applicability. Temporary procedures include a designation of the time period during which they may be used.

The procedures used by Consumers Energy to control its activities include the following:

1. Administrative Procedures.
2. System procedures that describe the operation of the plant.
3. Start-up procedures that provide for starting the reactor from hot or cold condition and recovering from reactor trips.
4. Shutdown procedures that provide for controlled reactor shutdown or shutdown following reactor trips.
5. Power operation and load changing procedures that provide for steady state power operation and load changing, including response to unanticipated load changes.

6. Process monitoring procedures that provide for monitoring plant system performance and which, as appropriate, identify limits for significant process parameters.
7. Fuel-handling procedures that provide for activities such as:
  - a. Core alterations
  - b. Refueling
  - c. Fuel accountability
  - d. Receipt and shipment of fuel
  - e. Nuclear safety measures
8. Maintenance procedures that provide for:
  - a. Preparation for maintenance
  - b. Performance of maintenance
  - c. Post-maintenance and operability checks and tests
  - d. Use of supporting maintenance documents
9. Radiation control procedures that provide for:
  - a. Implementation of the radiation control program including the acquisition of radiation data
  - b. Identification of equipment for performing radiation surveys
  - c. Measurement, evaluation and assessment of radiation hazards
10. Calibration and test procedures that provide for:
  - a. Periodic calibration and testing of safety-related instrumentation and control systems
  - b. Calibration of portable measuring and test equipment used in activities affecting safety
11. Chemical-radiochemical control procedures that provide for activities including:
  - a. Sampling and analyses
  - b. Maintenance of coolant quality
  - c. Control of deleterious agents



- d. Control, treatment and management of radioactive wastes
  - e. The control of radioactive calibration sources
12. Emergency procedures that provide guidance for:
- a. Operations during potential emergencies so that a trained operator will know in advance the expected course of events that will identify an emergency and the immediate action he should take
  - b. Identifying symptoms of emergency conditions
  - c. Monitoring automatic action
  - d. Immediate operator action
  - e. Subsequent operator action
13. Emergency Plan Implementing Procedures
14. Inspection, test and examination procedures that identify:
- a. Objectives
  - b. Acceptance criteria
  - c. Prerequisite and special conditions
  - d. Limiting conditions
  - e. Test or inspection instructions
  - f. Any required special equipment or calibration
  - g. Hold and Witness points, as appropriate
15. Modification procedures that provide for:
- a. Administrative control and technical support during plant modifications
  - b. The basis for a consistent method of performing recurring engineering, construction and quality activities
  - c. Control of the interfaces between Consumers Energy and its suppliers
  - d. Control of onsite quality-related modification activities that assure the Quality Program is implemented and its effectiveness is assessed and reported

## 6.0 DOCUMENT CONTROL

### 6.1 REQUIREMENTS

Documents controlling safety-related activities within the scope defined in Section 2.0, QUALITY PROGRAM are issued and changed according to established procedures. Documents such as instructions, procedures and drawings, including changes thereto, are reviewed for adequacy, approved for release prior to implementation by authorized personnel\* and are distributed and used at the location where a prescribed activity is performed.

Changes to controlled documents are reviewed and approved by the same organizations that performed the original review and approval or by other qualified, responsible organizations specifically designated in accordance with the procedures governing these documents.

\* Personnel authorized to approve procedures specified by plant Technical Specifications are limited to:

1. For Palisades, an appropriate senior department manager, based on the activities addressed in the specific procedure, predesignated in writing by the Site Vice President; or
2. For Big Rock Point, the Plant General Manager.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
6.1	2h, 2n
6.2.3	2h, 2n, 2s, 12b

## 6.2 IMPLEMENTATION

6.2.1 The authority and responsibility for the control of documents are described in Section 1.0, ORGANIZATION.

6.2.2 Controls are established for approval, issue and change of documents in the following categories:

- a. Design documents (e.g., calculations, drawings, specifications, analyses) including documents related to computer codes
- b. As-built drawings (record drawings) and related documents
- c. Procurement documents
- d. Instructions and procedures for activities such as fabrication, construction, modification, installation, inspection, test and plant maintenance and operation which implement the Quality Program.

- e. Final Safety Analysis Report/Final Hazards Safety Report
- f. Reports of nonconformances
- g. Plant Technical Specifications

6.2.3 The review, approval, issue and change of the above documents are controlled by:

- a. Establishment of criteria to ensure that adequate technical and quality requirements are incorporated.
- b. Identification of the organizations responsible for review, approval, issue and revision.
- c. Review of changes to documents by the organizations designated in accordance with the procedure governing the review and approval of specific types of documents, including quality aspects.

6.2.4 Controlled documents are issued and distributed so that:

- a. The documents are available at the work location prior to commencing work
- b. Obsolete or superseded documents are removed from work areas and replaced by applicable revisions in a timely manner

6.2.5 Master lists or equivalent controls are used to identify the current revision of instructions, procedures, specifications, drawings and procurement documents. When master lists are used they are updated and distributed to designated personnel who are responsible for maintaining current copies of the lists.

6.2.6 Accurate as-built drawings (record drawings) and related documentation are prepared in a timely manner.



## 7.0 CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES

### 7.1 REQUIREMENTS

Activities that implement approved procurement requests for safety-related material, equipment and services are controlled to assure conformance with procurement document requirements. Controls include a system of supplier evaluation and selection, source inspection, examination and acceptance of items and documents upon delivery, and periodic assessment of supplier performance. Objective evidence of quality that demonstrates conformance with specified procurement document requirements is available to the nuclear power plant site prior to reliance on equipment, material or services for nuclear safety.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
7.1	2i
7.2.2	16d
7.2.3	7b, 17e
7.2.5	2m, 7e, 17f
7.2.6	2m, 9b, 13c, 13d, 17f

### 7.2 IMPLEMENTATION

7.2.1 Authority and responsibility for implementing the controls outlined herein are described in Section 1.0, ORGANIZATION.

7.2.2 Consumers Energy qualifies suppliers by performing a documented evaluation of their capability to provide items or services specified by procurement documents. To remain qualified, suppliers involved in active procurements are evaluated continuously and are audited triennially. If an audit is acquired from an external source, the audit is evaluated prior to its use.

Supplier evaluation and triennial audits are not necessary when the items or services supplied are all of the following:

- Relatively simple and standard in design, manufacture and test, and
- Adaptable to standard or automated inspections or tests of the end product to verify quality characteristics after delivery, and
- Such that receiving inspection does not require operations that could adversely affect the integrity, function or cleanness of the item.

In the above cases, source and/or receipt inspection provides the necessary assurance of an acceptable item or service.

7.2.3 Supplier activities that affect quality are verified in accordance with written procedures. These procedures provide the method of verifying (such as audit, surveillance or inspection)

and documenting that the characteristics or processes meet the requirements of the procurement document. For commercial "off-the-shelf" items where the requirements for a specific quality assurance program appropriate for nuclear applications cannot be imposed in a practical manner, source verification is used to provide adequate assurance of acceptability unless the quality of the item can be adequately verified upon receipt.

- 7.2.4 Spare and replacement parts are procured in such a manner that their performance and quality are at least equivalent to those of the parts that will be replaced.
- a. Specifications and codes referenced in procurement documents for spare or replacement items are at least equivalent to those for the original items or to properly reviewed and approved revisions.
  - b. Parts intended as spares or replacements for "off-the-shelf" items, or other items for which quality requirements were not originally specified, are evaluated for performance at least equivalent to the original.
  - c. Where quality requirements for the original items cannot be determined, requirements and controls are established by engineering evaluation performed by qualified individuals. The evaluation assures there is no adverse effect on interfaces, interchangeability, safety, fit, form, function, or compliance with applicable regulatory or code requirements. Evaluation results are documented.
  - d. Any additional or modified design criteria, imposed after previous procurement of the item(s), are identified and incorporated.
- 7.2.5 Receipt inspections are performed to verify that items are undamaged and properly identified, that they conform with safety-related procurement requirements not previously verified by source surveillance or inspection and that required supplier furnished documentation is available. Items inspected are identified as to their acceptance status prior to their storage or release for installation.
- 7.2.6 Suppliers are required to furnish the following records:
- a. Applicable drawings and related engineering documentation that identify the purchased item and the specific procurement requirements (e.g., codes, standards, and specifications) met by the item.
  - b. Documentation identifying any procurement requirements that have not been met.
  - c. A description of those nonconformances from the procurement requirements dispositioned "accept as is" or "repair."
  - d. Quality records as specified in the procurement requirements.
- The acceptability of these documents is evaluated during source and/or receipt inspection.
- 7.2.7 Supplier's certificates of conformance are periodically evaluated by audits, independent inspections, or tests to assure that they are valid. The results of these evaluations are documented.

## 8.0 IDENTIFICATION AND CONTROL OF ITEMS

### 8.1 REQUIREMENTS

Safety-related materials, parts and components (items) are identified and controlled to prevent their inadvertent use. Identification of items is maintained either on the items, their storage areas or containers, or on records traceable to the items.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
8.2.2	7d, 7g
8.2.3	7a

### 8.2 IMPLEMENTATION

- 8.2.1 Controls are established that provide for the identification and control of materials (including consumables), parts and components, (including partially fabricated assemblies). Responsibility for the identification and control of items is described in Section I.O, ORGANIZATION.
- 8.2.2 Items are identified by physically marking the item, its storage area or its container or by maintaining records traceable to the item. The method of identification is such that the quality of the item is not degraded.
- 8.2.3 Items are traceable to applicable drawings, specifications, or other pertinent documents to ensure that only correct and acceptable items are used. Verification of traceability is performed and documented prior to release for fabrication, assembly, or installation.



## 9.0 CONTROL OF SPECIAL PROCESSES

### 9.1 REQUIREMENTS

Special processes affecting safety-related structures, systems, and components are controlled and are accomplished by qualified personnel using qualified procedures and equipment in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
9.2.1	6c, 13e

### 9.2 IMPLEMENTATION

- 9.2.1 Processes subject to special process controls at Consumers Energy are those for which full verification or characterization by direct inspection is impossible or impractical. Such processes include welding, heat treating, chemical cleaning, application of protective coatings, concrete placement, and nondestructive examination.
- 9.2.2 Organizational responsibility for implementation of special processes and for qualification of procedures, personnel, and equipment used to perform special processes is indicated in Section 1.0, ORGANIZATION.
- 9.2.3 Special process procedures are prepared by personnel with expertise in the discipline involved. The procedures are reviewed for technical adequacy by other personnel with the necessary technical competence, and are qualified by testing, as necessary.
- 9.2.4 Special process personnel qualification is determined by individuals authorized to administer the pertinent examinations. Certification is based on examination results. Personnel qualification is kept current by performance of the special process(es) and/or reexamination at time intervals specified by applicable codes, specifications, and standards. Unsatisfactory performance or, where applicable, failure to perform within the designated time intervals requires recertification.
- 9.2.5 For special processes that require qualified equipment, such equipment is qualified in accordance with applicable codes, standards and specifications.
- 9.2.6 Qualification records are maintained in accordance with Quality Program Description Section 17.
- 9.2.7 The Nuclear Performance Assessment Department audits/assesses special process activities, including qualification activities to assure they are satisfactorily performed.

10.0 INSPECTION

10.1 REQUIREMENTS

Activities affecting the quality of safety-related structures, systems, and components are inspected to verify their conformance with requirements. Inspections are accomplished by independent verification or process monitoring as necessary. Verification points are used as necessary to ensure that inspections are accomplished at the correct points in the sequence of work activities.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
10.2.2	2p, 2q
10.2.3	2j, 6a
10.2.7	2j, 6a
10.2.10	2j

10.2 IMPLEMENTATION

10.2.1 Organizational responsibilities are as described in Section 1.0, ORGANIZATION.

10.2.2 Inspections are applied to procurement, maintenance, modification, testing, fuel handling, and inservice inspection to verify that items and activities conform to specified requirements. Work authorizing documents (e.g.; procedures, instructions, maintenance work orders) are reviewed in accordance with established criteria to do the following as necessary:

- a. Determine the need for inspection(s).
- b. Identify the inspection organization or personnel.
- c. Identify independent verification points.
- d. Determine how and when the inspections are to be performed.
- e. Specify measuring and test equipment of the necessary accuracy for performing inspection.
- f. Provide for documentation of inspection results to provide adequate objective evidence of acceptability.

Independent verification is performed at each operation where it is necessary to verify conformance with requirements.

Process monitoring is used in whole or in part where direct inspection alone is impractical or inadequate.

- 10.2.3 Training and qualification programs for personnel who perform inspections, including nondestructive examination, are established, implemented, and documented in accordance with Section 2.0, QUALITY PROGRAM, and plant or offsite procedures. These programs meet the requirements of applicable codes and standards. The Site Vice President/Plant General Manager is responsible for review and concurrence with plant training and qualification programs that are under his direct responsibility.

Training and qualification programs for E&TS personnel who perform inspections, including nondestructive examination, are documented in E&TS procedures.

Training and qualification programs for System Maintenance and Construction Services (SM&CS) personnel who perform inspections are documented in SM&CS procedures.

Qualifications and certifications of inspection and NDE personnel are maintained.

- 10.2.4 Inspection requirements are specified in procedures, instructions, drawings or checklists and are either provided or concurred with by the organization that performs the inspection planning. They (procedures, etc) provide for the following as appropriate:
- a. Identification of applicable revisions of required instructions, drawings and specifications.
  - b. Identification of characteristics and activities to be inspected.
  - c. Inspection methods (independent verification or process monitoring).
  - d. Specification of measuring and test equipment having the necessary accuracy.
  - e. Identification of personnel responsible for performing the inspection.
  - f. Acceptance and rejection criteria.
  - g. Recording of the inspection results and the identification of the inspector.
- 10.2.5 Independent verification points are designated when confirmation is needed that critical characteristics are acceptable before the work can be allowed to proceed further. Independent verifications are performed, and work is released for further processing or use, by assigned verification personnel. Independent verification points may be waived only by the organization that performs the inspection planning.
- 10.2.6 Independent verifications are performed and documented in accordance with the written instructions provided. The results are evaluated by designated personnel in order to ensure that the results substantiate the acceptability of the item or work. Evaluation and review results are documented.

Independent verification should be designated when the activity/task being verified is necessary to ensure critical characteristics are in conformance with requirements and/or the verification is result of codes, standards, regulations, or commitments.



10.2.7 Independent verification may be performed by individuals in the same organization as that which performed the work provided:

- a. Qualifications of the independent verifier are equal to or better than the minimum qualifications for persons who can be authorized to perform the task; and
- b. The work is within the skills of Consumers Energy personnel and/or is addressed by Consumers Energy procedures.
- c. If work involves breaching a pressure retaining item, the quality of the work can be demonstrated through a functional test.

When a, b, and c are not met, inspections will be carried out by individuals certified in accordance with ANSI N45.2.6.

The verification is performed by individuals other than the person(s) performing or directly supervising the work.

10.2.8 For independent verification, when acceptance criteria are not met, corrected areas are to be reverified. Results of independent verification are documented and retained for the purposes of performance trending and analysis.

10.2.9 The independent verifier has the authority to stop work if inspection criteria are not met. Resolution of disagreements between the verifier and worker is resolved by plant management.

10.2.10 Contractors may be used as independent verifiers in accordance with Section 10.2.7 provided:

- a. The work is performed using the Consumers Energy Quality Program and procedures.
- b. Individuals are trained and qualified in accordance with Section 10.2.3.

Otherwise, contractors must be certified to ANSI N45.2.6 to perform inspections.

11.0 TEST CONTROL

11.1 REQUIREMENTS

Testing is performed in accordance with established programs to demonstrate that safety-related structures, systems, and components will perform satisfactorily in service. The testing is performed in accordance with written procedures that incorporate specified requirements and acceptance criteria. The test program includes qualification (as applicable), acceptance, pre-operational, start-up, surveillance, and maintenance tests. Test parameters, including any prerequisites, instrumentation requirements and environmental conditions are specified and met. Test results are documented and evaluated.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
11.2.2	2k, 17g

11.2 IMPLEMENTATION

11.2.1 Organizational responsibilities for testing are described in Section 1.0, ORGANIZATION.

11.2.2 Tests are performed in accordance with programs, procedures, and criteria that designate when tests are required and how they are to be performed. Such testing includes the following:

- a. Qualification tests, as applicable, to verify design adequacy in accordance with Section 3.0, DESIGN CONTROL.
- b. Acceptance tests of equipment and components to assure their proper operation prior to delivery or to pre-operational tests.
- c. Pre-operational tests to assure proper and safe operation of systems and equipment prior to start-up tests or operations.
- d. Start-up tests, including precritical, criticality, low-power, and power ascension tests, performed after refueling to assure proper and safe operation of systems and equipment.
- e. Surveillance tests to assure continuing proper and safe operation of systems and equipment.
- f. Maintenance tests after preventive or corrective maintenance.

11.2.3 Test procedures and instructions include provisions for the following, as applicable:

- a. The requirements and acceptance limits contained in applicable design and procurement documents.

- b. Test prerequisites such as calibrated instrumentation, adequate test equipment, and instrumentation including accuracy requirements, completeness of the item to be tested, suitable and controlled environmental conditions, and provisions for data collection and storage.
- c. Instructions for performing the test.
- d. Mandatory inspection hold points for witness by the appropriate authority.
- e. Acceptance and rejection criteria.
- f. Methods of documenting or recording test data and results.
- g. Assuring that test prerequisites have been met.
- h. Verification of completion of modification activities.

Test procedures and instructions are reviewed for technical content and quality aspects, by the plant engineering organization, or the offsite technical organization, as applicable

When acceptance criteria are not met, corrected areas are to be retested.



## 12.0 CONTROL OF MEASURING AND TEST EQUIPMENT

### 12.1 REQUIREMENTS

Measuring and testing equipment used in activities affecting the quality of safety-related systems, components and structures are properly identified, controlled, calibrated, and adjusted at specified intervals to maintain accuracy within necessary limits.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
12.2.3	2o, 9c
12.2.4	2o, 9c
12.2.5	10c
12.2.8	10b

### 12.2 IMPLEMENTATION

- 12.2.1 The authority and responsibility of personnel establishing, implementing and assuring effectiveness of calibration programs is described in Section 1.0, ORGANIZATION.
- 12.2.2 Procedures are established for measuring and test equipment utilized in the measurement, inspection and monitoring of structures, systems and components. These procedures describe calibration technique and frequency and maintenance and control of the equipment.
- 12.2.3 Measuring and test equipment is uniquely identified and is traceable to its calibration source.
- 12.2.4 Consumers Energy uses a system of labels to be attached to measuring and test equipment to display the next calibration due date. Where labels cannot be attached, a control system is used that identifies to potential users any equipment beyond the calibration due date.
- 12.2.5 Measuring and test equipment (M&TE) and installed plant instrumentation is calibrated at specified intervals based on the required accuracy, purpose, degree of usage, stability characteristics, and other conditions affecting the measurement.

Calibration of M&TE is against standards that have an accuracy of at least four times the required accuracy of the equipment being calibrated or, when this is not possible, have an accuracy that assures the equipment being calibrated will be within required tolerance and the basis of acceptance is documented and authorized by responsible management.

Calibration standards used for installed plant instrumentation shall normally have greater accuracy than the instrumentation being calibrated. Standards with the same accuracy may be used when shown to be adequate for specific calibration requirements. The basis for this acceptance is documented and is approved by responsible management.

- 12.2.6 Calibrating standards have greater accuracy than standards being calibrated. Calibrating standards with the same accuracy may be used if it can be shown to be adequate for the

requirements and the basis of acceptance is documented and authorized by responsible management.

- 12.2.7 Reference and transfer standards are traceable to nationally recognized standards; where national standards do not exist, provisions are established to document the basis for calibration.
- 12.2.8 When measuring and testing equipment used for inspection and test is found to be outside of required accuracy limits at the time of calibration, evaluations are conducted to determine the validity of the results obtained since the most recent calibration. The results of evaluations are documented. Retests or reinspections are performed on suspect items.

## 13.0 HANDLING, STORAGE AND SHIPPING

### 13.1 REQUIREMENTS

Activities with the potential for causing contamination or deterioration that could adversely affect the ability of a safety-related item to perform its intended safety functions, and activities necessary to prevent undetected or uncorrectable damage are identified and controlled. These activities include cleaning, packaging, preserving, handling, shipping, and storing. Controls are effected through the use of appropriate procedures and instructions implemented by suitably trained personnel.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
13.2.2	7a, 7c, 7d, 7f, 7g, 7h

### 13.2 IMPLEMENTATION

13.2.1 The authority and responsibility of personnel implementing and assuring the effectiveness of material cleaning, handling, storing, pack-aging, preserving, and shipping activities is described in Section 1.0, ORGANIZATION.

13.2.2 Procedures are used to control the cleaning, handling, storing, pack-aging, preserving, and shipping of materials, components and systems in accordance with design and procurement requirements. These procedures include, but are not limited to, the following functions:

- a. Cleaning, to assure that required cleanliness levels are achieved and maintained.
- b. Packaging and preservation, to provide adequate protection against damage or deterioration. When necessary, these procedures provide for special environments such as inert gas atmospheres, specific moisture content levels, and temperature levels.
- c. Handling, to preclude damage or safety hazards.
- d. Storing, to minimize the possibility of loss, damage to or deterioration of items in storage, including consumables such as chemicals, reagents, and lubricants. Storage procedures also provide methods to assure that specified shelf lives are not exceeded.



14.0 INSPECTION, TEST AND OPERATING STATUS

14.1 REQUIREMENTS

Operating status of safety-related structures, systems, and components is indicated by tagging of valves and switches, or by other specified means, in such a manner as to prevent inadvertent operation. The status of inspections and tests performed on individual items is clearly indicated by markings and/or logging under strict procedural controls to prevent inadvertent bypassing of such inspections and tests.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
14.1	2r
14.2.5	2i

14.2 IMPLEMENTATION

14.2.1 Organizational responsibilities are as described in Section 1.0, ORGANIZATION.

14.2.2 For modification activities, including item fabrication, installation and test, procurement documents, service contracts, and procedures specify the degree of control required for the indication of inspection and test status of structures, systems, and components.

14.2.3 Application and removal of inspection and welding stamps and of such status indicators as tags, markings, labels, etc, are controlled by procedures.

14.2.4 The sequence of inspections, tests and other operations important to safety are controlled by procedures. Changes in the approved sequence are subject to the same review and approval as the original, or as specified in administrative procedures if the original organization no longer exists.

14.2.5 The status of nonconforming, inoperable or malfunctioning structures, systems, and components is clearly identified and documented to prevent inadvertent use.

15.0 NONCONFORMING MATERIALS, PARTS OR COMPONENTS

15.1 REQUIREMENTS

Safety-related materials, parts, or components that do not conform to requirements are controlled in order to prevent their inadvertent use. Nonconforming items are identified, documented, segregated when practical, and dispositioned. Affected organizations are notified of nonconformances

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
15.1	2i

15.2 IMPLEMENTATION

15.2.1 Items, services, or activities that are deficient in characteristic, documentation, or procedure, which render the quality unacceptable or indeterminate, are identified as nonconforming and any further use is controlled. Nonconformances are documented and dispositioned, and notification is made to affected organizations. Personnel authorized to disposition, conditionally release, and close out nonconformances are designated. The authority and responsibility for the implementation of activities related to the processing and control of nonconforming materials, parts, or components are described in Section 1.0, ORGANIZATION.

- a. Nonconforming items are identified by marking, tagging, or segregating or by documented administrative controls. Documentation describes the nonconformance, the disposition of the nonconformance and the inspection requirements. It also includes signature approval of the disposition.
- b. The original inspection planning authority reviews the disposition of nonconformances, and documents concurrence with the acceptance, conditional release or repair of a nonconforming item.
- c. Items that have been repaired or reworked are inspected and tested in accordance with the original inspection and test requirements or alternatives that have been documented as acceptable and concurred with by the original inspection planning authority.
- d. Items that have the disposition of "repair" or "use as is" require documentation justifying acceptability. The changes are recorded to denote the as-built condition.

15.2.2 Dispositions of conditionally released items are closed out before the items are relied upon to perform safety-related functions.

15.2.3 Prior to the initiation of preoperational testing on an item, all nonconformances are corrected or dispositioned and evaluated for impact upon the item or the testing program.

- 15.2.4 Nonconformance reports are analyzed to identify quality trends. Trend reports, which highlight significant results, are issued periodically to upper management for review and assessment.



16.0 CORRECTIVE ACTION

16.1 REQUIREMENTS

Conditions adverse to quality of safety-related structures, systems, components, or activities, such as failures, malfunctions, deficiencies, deviations, defective material, and equipment and nonconformances are identified promptly and corrected as soon as practical.

For significant conditions adverse to quality, the cause of the condition is determined and corrective action is taken to preclude repetition. In these cases, the condition, cause and corrective action taken is documented and reported to appropriate levels of management for review and assessment.

16.2 IMPLEMENTATION

16.2.1 The responsibility and authority for the control of corrective action are described in Section 1.0, ORGANIZATION.

16.2.2 Controls are established to assure that conditions adverse to quality are identified and documented and that appropriate remedial action is taken.

16.2.3 For significant conditions adverse to quality, necessary corrective action is promptly determined and recorded. Corrective action includes determining the cause and extent of the condition, and taking appropriate action to preclude similar problems in the future. The controls also assure that corrective action is implemented in a timely manner.

## 17.0 QUALITY RECORDS

### 17.1 REQUIREMENTS

Records that furnish evidence of activities affecting the quality of safety-related structures, systems and components are maintained. They are accurate, complete and legible and are protected against damage, deterioration or loss. They are identifiable and retrievable.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
17.1	14b
17.2.5	14c
17.2.8	14a, 14c

### 17.2 IMPLEMENTATION

17.2.1 Responsibilities for the identification and control of Quality records are described in Section 1.0, ORGANIZATION.

17.2.2 Documents that furnish evidence of activities affecting quality are generated and controlled in accordance with the procedures that govern those activities. Upon completion, these documents are considered records. These records include:

- a. Results of reviews, inspections, surveillances, tests, audits, and material analyses
- b. Qualification of personnel, procedures, and equipment
- c. Operating logs
- d. Maintenance and modification procedures and related inspection results
- e. Reportable occurrences
- f. Records required by the Plant Technical Specifications
- g. Nonconformance reports
- h. Corrective action reports
- i. Other documentation such as drawings, specifications, procurement documents, calibration procedures, and reports

17.2.3 Inspection and test records contain the following where applicable:

- a. A description of the type of observation
- b. The date and results of the inspection or test

- c. Information related to conditions adverse to quality
  - d. Inspector or data recorder identification
  - e. Evidence as to the acceptability of the results
  - f. Action taken to resolve any discrepancies noted
- 17.2.4 When a document becomes a record, it is designated as permanent or nonpermanent and then transmitted to file. Nonpermanent records have specified retention times. Permanent records are maintained for the life of the item. Appendix E identifies retention periods for certain specific records.
- 17.2.5 Temporary storage of completed documents during processing to become records is in special fire-resistant file cabinets.
- 17.2.6 Only authorized personnel may issue corrections or supplements to records.
- 17.2.7 Traceability between the record and the item or activity to which it applies is provided.
- 17.2.8 Records are stored in remote, dual facilities to prevent damage, deterioration, or loss due to natural or unnatural causes. Records that can only be stored as originals, such as radiographs and some strip charts are retained in a four-hour fire-rated facility.



18.0 AUDITS

18.1 REQUIREMENTS

A comprehensive system of audits is carried out to provide independent assessment of performance and effectiveness of the Quality Program to achieve nuclear safety, including those elements of the program implemented by suppliers and contractors. Audits are performed in accordance with written procedures or checklists by qualified personnel not having direct responsibility in the areas audited. Audit results are documented and are reviewed by management. Follow-up action is taken where indicated.

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

<u>Paragraph</u>	<u>Exceptions/Interpretations</u>
18.2.2	3a, 3b, 16a, 16b
18.2.3	16c
18.2.9	2e

18.2 IMPLEMENTATION

- 18.2.1 Responsibility and authority for the audit program is described in Section 1.0, ORGANIZATION.
- 18.2.2 Internal audits are performed in accordance with established schedules that reflect the status and importance to safety of the activities being performed. Audits are conducted in accordance with frequencies stated in Appendix D, Audit Frequencies.
- 18.2.3 Audits of suppliers and contractors are scheduled based on the status and safety importance of the activities being performed as well as performance of the suppliers and contractors and are initiated early enough to assure effective quality during design, procurement, manufacturing, construction, installation, inspection, and testing.
- 18.2.4 Principal contractors are required to audit their suppliers based on performance and on a schedule based on the status and safety importance of the activities being performed. Such audits shall be initiated early enough to assure an effective Quality Program on the part of their suppliers.
- 18.2.5 Regularly scheduled audits are supplemented by special audits when significant changes are made in the Quality Program, when it is suspected that quality is in jeopardy or when an independent assessment of program effectiveness is considered necessary.
- 18.2.6 Audits include an objective evaluation of quality-related practices, procedures, instructions, activities and items, and review of documents and records to confirm that the Quality Program is effective and properly implemented.
- 18.2.7 Audit procedures and the scope, plans, checklists, and results of individual audits are documented.

- 18.2.8 Personnel selected for auditing assignments have experience or are given training commensurate with the needs of the audit and have no direct responsibilities in the areas audited.
- 18.2.9 Audit data are analyzed by the Nuclear Performance Assessment Department. The resulting audit reports identify any quality deficiencies and assess the effectiveness of the Quality Program in the area audited. The reports are distributed to the responsible management of both the audited and auditing organizations.
- 18.2.10 Management of the audited organization identifies and takes appropriate corrective action to correct observed deficiencies and to prevent recurrence of any significant conditions adverse to quality. Follow-up for internal audits is performed by the Nuclear Performance Assessment Department to ensure that appropriate corrective action is taken and is effective. Such follow-up includes re-audits when necessary. For Vendor Audits, such follow-up shall be performed by the organization performing the audit.

QPD MANUAL  
APPENDIX A, PART 1  
REGULATORY GUIDE AND ANSI STANDARD COMMITMENTS

The Consumers Energy Quality Program complies with the regulatory position of the Regulatory Guides referenced in this appendix as modified by the exceptions stated in Part 2.

1. Appendix B to 10 CFR, Part 50, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants.
2. 10 CFR, Part 50.55a - Codes and Standards.
3. Regulatory Guide 1.8 - (9/80 Draft) - Personnel Qualification and Training - Endorses ANSI/ANS 3.1 - (12/79 Draft) application limited as described in exceptions 4a and 5a of Appendix A, Part 2).
4. Regulatory Guide 1.26 - (2/76, Rev 3) - Quality Group Classification, and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants.
5. Regulatory Guide 1.29 - (9/78, Rev. 3) - Seismic Design Classification.
6. Regulatory Guide 1.30 (Safety Guide 30) - (8/11/72) - Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electrical Equipment - Endorses ANSI N45.2.4 - 1972.
7. Regulatory Guide 1.33 - (2/78, Rev 2) - Quality Assurance Program Requirements (Operation) - Endorses ANSI N18.7 - 1976.
8. Regulatory Guide 1.37 - (3/16/73) - Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants - Endorses ANSI N45.2.1 - 1973.
9. Regulatory Guide 1.38 - (5/77, Rev 2) - Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for water-Cooled Nuclear Power Plants - Endorses ANSI N45.2.2 - 1972.
10. Regulatory Guide 1.39 - (9/77, Rev 2) - Housekeeping Requirements for water-Cooled Nuclear Power Plants - Endorses ANSI N45.2.3 - 1973.
11. Regulatory Guide 1.58 - (9/80, Rev 1) - Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel - Endorses N45.2.6 1978.
12. Regulatory Guide 1.64 - (6/76, Rev 2) - Quality Assurance Requirements for the Design Of Nuclear Power Plants - Endorses N45.2.11 - 1974.
13. Regulatory Guide 1.74 - (2/74) - Quality Assurance Requirements Terms and Definitions - Endorses ANSI N45.2.10 - 1973.



14. Regulatory Guide 1.88 - (10/76, Rev 2) - Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records - Endorses N45.2.9 - 1974.
15. Regulatory Guide 1.94 - (4/76, Rev 1) - Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants -Endorses ANSI N45.2.5 - 1974.
16. Regulatory Guide 1.116 - (5/77) - Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems - Endorses ANSI N45.2.8 - 1975.
17. Regulatory Guide 1.123 - (7/77, Rev 1) - Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants - Endorses N45.2.13 - 1976.
18. Regulatory Guide 1.144 - (9/80, Rev 1) - Auditing of Quality Assurance Programs for Nuclear Power Plants - Endorses N45.2.12 - 1977.
19. Regulatory Guide 1.146 - (8/80) - Qualification of Quality Assurance program Audit Personnel for Nuclear Power Plants - Endorses N45.2.23 -1978.
20. Branch Technical Position ASB9.5.1 (Rev 1) Guidelines for Fire Protection for Nuclear Power Plants.
21. 10 CFR 50, Appendix R, Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979, Sections III G., III J. and III O.
22. ANSI/ANS 3.1-1987, Selection, Qualification, and Training of Personnel for Nuclear Power Plants (application limited as described in Appendix C of this document).

QPD MANUAL  
APPENDIX A, PART 2  
CONSUMERS ENERGY EXCEPTIONS TO OPERATING PHASE STANDARDS  
AND REGULATORY GUIDES

1. General

Requirement

Certain Regulatory Guides invoke or imply Regulatory Guides and standards in addition to the standard each primarily endorses.

Certain ANSI Standards invoke or imply additional standards.

Exception/Interpretation

The Consumers Energy commitment refers to the Regulatory Guides and ANSI Standards specifically identified in Appendix A, Part 1. Additional Regulatory Guides, ANSI Standards, and similar documents implied or referenced in those specifically identified are not part of this commitment.

Imposition of these Regulatory Guides on Consumers Energy suppliers and sub-tier suppliers will be on a case-by-case basis depending upon the item or service to be procured.

2. N18.7 General

Exception/Interpretation

Consumers Energy has established an organizational unit, Nuclear Performance Assessment Department, for independent review activities.

The standard numeric and qualification requirements may not be met by the Nuclear Performance Assessment Department staff. Procedures will be established to specify how NPAD will acquire necessary expertise to carry out its review responsibilities in accordance with Appendix C, Independent Safety Review.

2a. N18.7, Sec 3.4.2

Requirement

"The Plant Manager shall have overall responsibility for the execution of the administrative controls and quality assurance program at the plant to assure safety."

Exception/Interpretation

Since Consumers Energy has more than one nuclear unit and more than one organization providing services to these units, overall responsibility cannot be centralized in a single on-site position. Instead, responsibilities are as designated within the Quality Program Description.

2b. N18.7, Sec 4.3.1

Requirement

"Personnel assigned responsibility for independent reviews shall be specified in both number and technical disciplines and shall collectively have the experience and competence required to review problems in the following areas:..."

Exception/Interpretation

The Nuclear Performance Assessment Department will not have members specified by number or by technical disciplines and its members may not have the experience and competence required to review problems in all areas listed in this section; however, the Nuclear Performance Assessment Department will function as described in Appendix C, Independent Safety Review, and will acquire the services of personnel having such experience and competence as necessary.

2c. N18.7, Sec 4.3.4

Requirement

"The following subjects shall be reviewed by the independent review body:"

Exception/Interpretation

Subjects requiring review will be as specified in Appendix C, Independent Safety Review.

2d. N18.7, Sec 4.3.4(3)

Requirement

Changes in the Technical Specifications or license amendments relating to nuclear safety are to be reviewed by the independent review body prior to implementation, except in those cases where the change is identical to a previously reviewed proposed change.

Exception/Interpretation

The Nuclear Performance Assessment Department will not review Technical Specification Changes after NRC approval prior to implementation. The basis for this position is that all Technical Specification changes are reviewed prior to submittal to the NRC.



2e. N18.7, Sec 4.5

Requirement

Written reports of audits specified in ANSI N18.7 shall be reviewed by the independent review body and by appropriate members of Management including those having responsibility in the area audited.

Exception/Interpretation

The Nuclear Performance Assessment Department shall review or arrange for reviews of those audits over which it has cognizance, in accordance with Appendix C, Independent Safety Review.

Some of the audits required during the operational phase are in areas other than those requiring independent review in accordance with ANSI N18.7, Section 4.3.4.

2f. N18.7, Sec 4.5

Requirement

Periodic review of the audit program shall be performed by the independent review body or by a management representative at least semiannually to assure that audits are being accomplished in accordance with requirements of technical specifications and of this standard.

Exception/Interpretation

Audits of operational nuclear safety related facility activities are performed under the cognizance of the Nuclear Performance Assessment Department as described in Appendix C, Independent Safety Review.

2g. N18.7, Sec 5.2.1

Requirement

"The responsibilities and authorities of the plant operating personnel shall be delineated."

Exception/Interpretation

On-site personnel not directly associated with operating activities, as defined in ANSI N18.7, Section 2.2, are not considered to be operating personnel.

2h. N18.7, Sec 5.2.2

Requirement

"Temporary changes, which clearly do not change the intent of the approved procedure, shall as a minimum be approved by two members of the plant staff knowledgeable in the areas affected by the procedures. At least one of these individuals shall be the supervisor in charge of the shift and hold a senior operators license on the unit affected."

Exception/Interpretation

Consumers Energy considers that this requirement applies only to procedures identified in Plant Technical Specifications and to Security and Emergency Plans implementing procedures. Temporary changes to these procedures may be made provided:

- a. The intent of the original procedure is not altered;
  - b. The change is approved by two members (or designated alternates) of the PRC, at least one of whom holds a Senior Reactor Operator License; and
  - c. The change is documented, subsequently reviewed by the PRC within 30 days of issuance and approved by:
    1. Appropriate\* senior Palisades department manager predesignated by the Site Vice President; or
    2. The Big Rock Point Plant General Manager.
- \* Determination of the appropriate senior Palisades department manager is based on the activities addressed in the specific procedure, and will be predesignated in writing by the Palisades Plant Site Vice President.

2i. N18.7, Sec 5.2.6

Requirement

"In cases where required documentary evidence is not available, the associated equipment or materials must be considered nonconforming in accordance with Section 5.2.14. Until suitable documentary evidence is available to show the equipment or material is in conformance, affected systems shall be considered to be inoperable and reliance shall not be placed on such systems to fulfill their intended safety functions."

Exception/Interpretation

Consumers Energy initiates appropriate corrective action when it is discovered that documentary evidence does not exist for a test or inspection which is required to verify equipment acceptability. This action includes a technical evaluation of the equipment's operability status.

2j. N18.7, Sec 5.2.7

Requirement

The following standards contain useful guidance concerning design and construction-related activities associated with modifications and shall be applied to those activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during initial plant design and construction: American National Standard Installation, Inspection and Testing of Instrumentation and Electric Equipment During the Construction of Nuclear Power Generation Station, N45.2.4-1972 (IEEE 336-1972) [6]; American National Standard Supplementary Quality Assurance Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants, N45.2.5-1974 [7]; American National Standard Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants N45.2.6-1973 [5]; American National Standard Supplementary Quality Assurance Requirements for Installation, Inspection and Testing of Mechanical Equipment and Systems for Construction Phase of Nuclear Power Plants N45.2.8-1975 [8]; American National Standard Quality Assurance Requirements for the Design of Nuclear Power Plants, N45.2.11 1974 [9]; and American National Standard Quality Assurance for Protective Coating Applied to Nuclear Facilities N101.4-1972 [10]. Considerable care is required in assessing which operational phase activities are comparable in nature and extent to activities normally associated with design and construction.

Exception/Clarification

Work that is within the skills of Consumers Energy personnel and is covered by Consumers Energy procedures may be inspected by independent verifiers qualified in accordance with Section 10.2.3 and 10.2.7 and 10.2.10, rather than ANSI N45.2.6.

2k. N18.7, Sec 5.2.8

Requirement

"A surveillance testing and inspection program...shall include the establishment of a master surveillance schedule reflecting the status of all planned inplant surveillance tests and inspections."

Exception/Interpretation

Separate master schedules may exist for different programs such as ISI, Pump and Valve Testing, and Technical Specification Surveillance Testing.



2l. N18.7, Sec 5.2.13.1

Requirement

"To the extent necessary, procurement documents shall require suppliers to provide a quality assurance program consistent with the pertinent requirements of ANSI N45.2 - 1971."

Exception/Interpretation

To the extent necessary, procurement documents require that the supplier have a documented quality assurance program consistent with the pertinent requirements of ANSI N45.2 or other nationally recognized codes and standards.

2m. N18.7, Sec 5.2.13.2

Requirement

ANSI N18.7 and N45.2.13 specify that where required by code, regulation, or contract, documentary evidence that items conform to procurement requirements shall be available at the nuclear power plant site prior to installation or use of such items.

Exception/Interpretation

The required documentary evidence is available at the site prior to use, but not necessarily prior to installation. This allows installation to proceed while any missing documents are being obtained, but precludes dependence on the item for safety purposes.

2n. N18.7, Sec 5.2.15

Requirement

Plant procedures 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.

Exception/Interpretation

Consumers Power has in place programmatic procedure preparation, review and usage controls that ensure procedures are technically and administratively correct and make a biennial review program unnecessarily duplicative. These controls ensure that procedures are reviewed when pertinent source material is revised (such as when Technical Specifications are revised), when unusual incidents occur, when plant modifications are made, and when significant deficiencies are identified. In addition, procedures may be reviewed because industry experience reviews or self-assessments identify deficiencies or opportunity for improvement. Revisions are made as necessary.

Because of their critical nature, non-routine procedures, such as Emergency Operating Procedures, Off-Normal Procedures, Special Operating Procedures, Special Test Procedures, Fuel Handling Procedures, Emergency Plan Implementing Procedures, and others where use would be dictated by a particular event are reviewed at least every two years and revised as appropriate.

In addition, procedures that have not been used or reviewed for two years are reviewed prior to use to determine if changes are necessary or desirable.

An assessment performed at least every two years includes examination of selected plant procedures to determine procedure acceptability and verify that the procedure review and revision controls are effectively implemented. Identified deficiencies are corrected in accordance with Section 16.0 of this QPD.

2o. N18.7, Sec 5.2.16

Requirement

Records shall be made and equipment suitably marked to indicate calibration status.

Exception/Interpretation

See Item 9c.

2p. N18.7, Sec 5.2.17

Requirement

For modifications and non-routine maintenance, inspections shall be conducted in a manner similar (frequency, type, and personnel performing such inspections) to that associated with construction phase activities (see also Section 5.2.7)

Exception/Interpretation

Maintenance and modification activities which are within the skills of Consumers Energy maintenance personnel and is carried out using Consumers Energy procedures may be inspected by independent verifiers qualified in accordance with Sections 10.2.3, 10.2.7, and 10.2.10 of this program description.

2q. N18.7, Sec 5.2.17

Requirement

If mandatory inspection hold points are required, the specific hold points shall be indicated in appropriate documents. Information concerning inspection shall be obtained from the related design drawings, specifications, and/or other controlled documents.

Exception/Interpretation

Consumers Energy uses the terminology "independent verification points" as equivalent to hold points.

2r. N18.7, Sec 5.3.5(3)

Requirement

Instructions shall be included, or referenced (in maintenance procedures), for returning the equipment to its normal operating status.

Exception/Interpretation

At Consumers Energy, equipment is returned to its normal operating status, i.e., declared operable, by licensed Operations Department personnel, not Maintenance personnel. Operations personnel verify and document equipment operability through second level line-up verification or appropriate functional testing.

2s. N18.7, Sec 5.3.5(4)

Requirement

This section requires that where sections of documents such as vendor manuals, operating and maintenance instructions, or drawings are incorporated directly or by reference into a maintenance procedure, they shall receive the same level of review and approval as operating procedures.

Exception/Interpretation

Such documents are reviewed by appropriately qualified personnel prior to use to ensure that, when used as instructions, they provide proper and adequate information to ensure the required quality of work. Maintenance procedures which reference these documents receive the same level of review and approval as operating procedures.

3a. RG 1.33, Sec C4a

Requirement

The results of actions taken to correct deficiencies that affect nuclear safety and occur in facility equipment, structures, systems, or method of operation are to be audited at least once per six months.

Exception/Interpretation

Performance trends are reviewed by the Nuclear Performance Assessment Specialists. In addition, the corrective action system is audited in accordance with Appendix D, Audit Frequencies.



3b. RG 1.33, Sec C4b

Requirement

The conformance of facility operations to provisions contained within the Technical Specifications and applicable license conditions-at least once per 12 months.

Exception/Interpretation

Consistent with guidance presented in NRC letters dated March 29, 1983 (RLSpessard to JMTaylor) and January 30, 1984 (JGPartlow to RLSpessard), Consumers Energy interprets the commitment to audit Technical Specification/license conditions contained in 18.2.2 of this QPD, and in Appendix D, Audit Frequencies, as follows:

Consumers Energy maintains a matrix that identifies all applicable Technical Specification line items to be audited. The matrix is updated annually to conform to approved Technical Specification changes. During each 12 month period, a selected sample of line items, with the exception of the onsite and offsite review committee which are audited every 24 months, is audited:

1. Limiting Conditions for Operation
2. Limiting Safety System Settings
3. Reactivity Control Systems
4. Power Distribution Limits
5. Instrumentation
6. Reactor Coolant System
7. Emergency Core Cooling System
8. Containment Systems
9. Plant Systems
10. Electrical Power Systems
11. Refueling Operations
12. Special Tests
13. Onsite Committee
14. Offsite Committee
15. Administrative Controls

Audits are scheduled so that all line items are covered within a maximum period of 5 years. The audit period for any of the above elements may be reduced depending on Technical Specification compliance history.

4a. ANS 3.1, General

Exception/Interpretation

The commitment (12/79, draft) is to the requirements that apply to the training and qualification of performing independent quality assurance functions, except for Lead Auditors. Lead Auditors are trained and designated in accordance with regulatory Guide 1.146 (8/80)/ANSI 45.2.23-1978. Other personnel are trained and designated in plant Technical Specifications.

5a. RG 1.8, C.3.1, General

Exception/Interpretation

The commitment to Regulatory Guide 1.8 (9/80, draft) is limited to the requirements that apply to the training and qualification of persons performing independent quality assurance functions, except for Lead Auditors. Lead Auditors are trained and qualified to Regulatory Guide 1.146 (8/80)/ ANSI N45.2.23-1978. Other personnel are trained and qualified as designated in plant Technical Specifications.

5b. RG 1.8, C1.2.2

Requirement

"When an individual is hired to temporarily function as a plant employee, such as for contracted services, evidence of previous education, experience, and training should be provided and reviewed by the appropriate professional-technical group leaders. The appropriate group leaders should then determine the content for that individual's training, including plant-specific training. As a minimum, each individual should receive General Employee Training."

Exception/Interpretation

Consumers Energy understands that this requirement applies both to Consumers Energy employees from another site and to contract personnel who are temporarily assigned to a nuclear power plant either as replacements for regular employees or to augment the staff during outages. Consumers Energy employees so assigned possess the required qualifications as a prerequisite to the assignment and the review is waived. The qualifications of contract personnel are reviewed and arrangements made for any necessary training. Temporarily assigned personnel requiring unescorted access receive the site general orientation as embodied in General Employee Training.

6a. N45.2.1, Sec 2.4

Requirement

Those personnel who perform inspection, examination, or testing activities required by this standard shall be qualified in accordance with ANSI N45.2.6 Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants.

Exception/Interpretation

Consumers Energy certifies its inspectors in accordance with Paragraph 10.2.7 of CPC-2A unless the work is comparable in nature and extent to original construction (See Item 2j).

6b. N45.2.1, Sec 3.1

Requirement

N45.2.1 establishes criteria for classifying items into "cleanness levels," and requires that items be so classified.

Exception/Interpretation

Instead of using the cleanness level classification system of N45.2.1, the required cleanness for specific items and activities is addressed on a case-by-case basis.

Cleanness is maintained, consistent with the work being performed, so as to prevent the introduction of foreign material. As a minimum, cleanness inspections are performed prior to system closure. Such inspections are documented.

6c. N45.2.1, Sec 5

Requirement

"Fitted and tack-welded joints (which will not be immediately sealed by welding) shall be wrapped with polyethylene or other nonhalogenated plastic film until the welds can be completed."

Exception/Interpretation

Consumers Energy sometimes uses other nonhalogenated material, compatible with the parent material, since plastic film is subject to damage and does not always provide adequate protection.

7a. N45.2.2, General

Requirement

N45.2.2 establishes requirements and criteria for classifying safety-related items into protection levels.

Exception/Interpretation

Instead of classifying safety-related items into protection levels, controls over the packaging, shipping, handling, and storage of such items are established on a case-by-case basis with due regard for the item's complexity, use, and sensitivity to damage. Prior to installation or use, the items are inspected and serviced as necessary to assure that no damage or deterioration exists which could affect their function.



7b. N45.2.2, Sec 2.4

Requirement

"...Offsite inspection, examination or testing shall be audited and monitored by personnel who are qualified in accordance with N45.2.6."

Exception/Interpretation

Offsite inspection, examination, or testing activities are audited or inspected by persons qualified and certified in accordance with ANSI N45.2.23-1978, as endorsed by Reg Guide 1.146, or by personnel meeting the requirements of 10.2.7, respectively. Monitoring activities not involving audit or inspection may be conducted by persons trained and qualified to effectively carry out such tasks, but not necessarily certified to either ANSI N45.2.23, N45.2.6 or Paragraph 10.2.7.

7c. N45.2.2, Sec 3.4.1 and Appendix A, 3.4.1(4) and (5)

Requirement

"(4) ...However, preservatives for inaccessible inside surfaces containing reactor coolant water shall be indicated to facilitate touch up.

(5) The name of the preservative used shall be the water flushable type."

Exception/Interpretation

Based on comparison of these statements to ANSI/ASME NQA-2 1983, Consumers Energy believes the intent was to establish the following as requirements:

"(4) ...However, preservatives for inaccessible inside surfaces of pumps, valves, and pipe for systems containing reactor coolant water shall be the water flushable type.

(5) The name of the preservative used shall be provided to facilitate touch-up."

7d. N45.2.2, Sec 3.9 and Appendix A 3.9

Requirement

"The item and the outside of containers shall be marked."

(Further criteria for marking and tagging are given in the appendix.)

Exception/Interpretation

These requirements were originally written for items packaged and shipped to construction projects. Full compliance is not always necessary in the case of items shipped to operating plants and may, in some cases, increase the probability of damage to the item. The requirements are implemented to the extent necessary to assure traceability and integrity of the item.

7e. N45.2.2, Sec 5.2.2

Requirement

"The inspections shall be performed in an area equivalent to the level of storage."

Exception/Interpretation

Receiving inspection area environmental controls may be less stringent than storage environmental requirements for an item. However, such inspections are performed in a manner and in an environment which do not endanger the required quality of the item.

7f. N45.2.2, Sec 6.2.4

Requirement

"The use or storage of food, drinks, and salt tablet dispensers in any storage area shall not be permitted."

Exception/Interpretation

Packaged food for emergency or extended overtime use may be stored in material stock rooms. The packaging assures that materials are not contaminated. Food will not be "used" in these areas.

7g. N45.2.2, Sec 6.3.4

Requirement

"All items and their containers shall be plainly marked so that they are easily identified without excessive handling or unnecessary opening of crates and boxes."

Exception/Interpretation

See N45.2.2, Section 3.9 (Exception 7d.).

7h. N45.2.2, Sec 6.4.1

Requirement

"Inspections and examinations shall be performed and documented on a periodic basis to assure that the integrity of the item and its container...is being maintained."

Exception/Interpretation

The requirement implies that all inspections and examinations of items in storage are to be performed on the same schedule. Instead, the inspections and examinations are performed and documented in accordance with material storage procedures which identify the characteristics to be inspected and include the required frequencies. These procedures are based on technical considerations which recognize that inspections and frequencies needed vary from item to item.

8a. N45.2.3, Sec 2.1

Requirement

Cleanliness requirements for housekeeping activities shall be established on the basis of five zone designations.

Exception/Interpretation

Instead of the five-level zone designation system referenced in ANSI N45.2.3, Consumers Energy bases its controls over housekeeping activities on a consideration of what is necessary and appropriate for the activity involved. The controls are effected through procedures or instructions which, in the case of maintenance or modifications work, are developed on a case-by-case basis. Factors considered in developing the procedures and instructions include cleanliness control, personnel safety, fire prevention and protection, radiation control, and security. The procedures and instructions make use of standard janitorial and work practices to the extent possible. However, in preparing these procedures, consideration is also given to the recommendations of Section 2.1 of ANSI N45.2.3.

9a. N45.2.4, Sec 2.2

Requirement

Section 2.2 establishes prerequisites which must be met before the installation, inspection, and testing of instrumentation and electrical equipment may proceed. These prerequisites include personnel qualification, control of design, conforming and protected materials, and availability of specified documents.

Exception/Interpretation

During the operations phase, this requirement is considered to be applicable to modifications and initial start-up of electrical equipment. For routine or periodic inspection and testing, the prerequisite conditions will be achieved as necessary.

9b. N45.2.4, Sec 2.2(5)

Requirement

Section 2.2(5) of ANSI N45.2.4 lists documents which are to be available at the construction site.

Exception/Clarification

All of the documents listed are not necessarily required at the plant site for installation and testing. Consumers Energy assures that they are available to the site as necessary.



9c. N45.2.4, Sec 6.2.1

Requirement

"Items requiring calibration shall be tagged or labeled on completion, indicating date of calibration and identity of person that performed the calibration."

Exception/Interpretation

Frequently, physical size, and/or location of Installed Plant Instrumentation (IPI) mandates that calibration labels or tags not be affixed to IPI. Instead, each instrument is uniquely identified and is traceable to its calibration record.

A scheduled calibration program assures that each instrument's calibration is current.

10a. N45.2.5, Sec 2.4

Requirement

"Persons charged with engineering managerial responsibility of the inspection and testing organization at the site in either a resident or non-resident capacity shall be certified for Level III capability."

Exception/Interpretation

This standard (N45.2.5) was written for the construction phase of nuclear power plants; as such, it presumes significant activity in the areas of concrete and structural steel which do not generally occur at an operating plant. At Consumers Energy, persons having engineering managerial responsibility for inspections and tests\* may be certified to Level III, or may meet other qualification criteria established for the position, including, but not limited to, nuclear power and management experience. For major modifications involving significant concrete or structural steel work, the services of a properly qualified Level III individual will be obtained in at least an advisory capacity.

\* within the scope of N45.2.5

10b. N45.2.5, Sec 2.5.2

Requirement

"When discrepancies, malfunctions, or inaccuracies in inspection and testing equipment are found during calibration, all items inspected with that equipment since the last previous calibration shall be considered unacceptable until an evaluation has been made by the responsible authority and appropriate action taken."

Exception/Interpretation

Consumers Energy uses the requirements of N18.7, Section 5.2.16, rather than N45.2.5, Section 2.5.2. The N18.7 requirements are more applicable to an operating plant.

10c. N45.2.5, Sec 5.4

Requirement

"Hand torque wrenches used for inspection shall be controlled and must be calibrated at least weekly and more often if deemed necessary. Impact torque wrenches used for inspection must be calibrated at least twice daily."

Exception/Interpretation

Torque wrenches are controlled as measuring and test equipment in accordance with ANSI N18.7, Section 5.2.16. Calibration intervals are based on use and calibration history rather than as per N45.2.5

11a. N45.2.6, Sec 1.2

Requirement

"The requirements of this standard apply to personnel who perform inspections, examinations, and tests during fabrication prior to and during receipt of items at the construction site, during construction, during preoperational and start-up testing, and during operational phases of nuclear power plants."

Exception/Interpretation

See Exception/Interpretation 2j for those inspectors who must be certified to this standard. Others are qualified to Paragraph 10.2.7 of CPC-2A.

Qualification of plant personnel who are involved with testing associated with plant operation is provided in specific plant specifications. In addition, personnel participating in inspection or testing who take data or make observations, where special training is not required to perform this function, need not be qualified in accordance with ANSI N45.2.6 but need only be trained to the extent necessary to perform the assigned function.

12a. RG 1.58, Sec C.1

Requirement

"However, for qualification of personnel (1) who approve preoperational, start-up and operational test procedures and test results and (2) who direct or supervise the conduct of individual preoperational, start-up and operational tests, the guidelines contained in Regulatory Guide 1.8, Personnel Selection and Training, should be followed in lieu of the Guidelines of ANSI N45.2.6 - 1978."

Exception/Interpretation

Consumers Energy endorses this position, as also stated in 11a, above, except that offsite support organizations involved in testing may apply ANSI N45.2.6. Some of these departments have already developed their qualification programs based on ANSI N45.2.6, and provide services throughout the operations phase of Consumers Energy Nuclear Plants.

12b. RG 1.58, Sec C.5

Requirement

"In addition, the individual should be capable of reviewing and approving inspection, examination and testing procedures and of evaluating the adequacy of such procedures to accomplish the inspection, examination and test objectives."

Exception/Interpretation

While a Level III individual should be capable of reviewing and approving inspection, examination and testing procedures and of evaluating the adequacy of such procedures to accomplish the inspection, examination and test objectives, this is not construed by Consumers Energy as requiring personnel who review, approve or evaluate such procedures to be certified as Level III personnel.

12.c. RG 1.58, Sec C.6

Requirement

"Since only one set of recommendations is provided for the education and experience of personnel, a commitment to comply with the regulatory position of this guide in lieu of providing an alternative to the recommendations of the standard means that the specified education and experience recommendations of the standard will be followed."

Exception/Interpretation

The education and experience recommendations given in ANSI N45.2.6, Section 3.5 will be treated as such, since our qualification and certification program is based upon these recommendations, and more significantly, upon satisfactory completion of capability testing prior to certification. It is our position that a candidate should not be required to be a high school graduate or have earned the GED equivalent for the above reasons.

12.d RG 1.58, Sec C.10

Requirement

"Use of the measures outlined in these actions to establish that an individual has the required qualifications in lieu of required education and experience should result in documented evidence (i.e., procedure and record of written test) demonstrating that the individual indeed does have comparable or equivalent competence to that which would be gained from having the required education and experience."



Exception/Interpretation

We will maintain documented objective evidence that demonstrates that an individual does have "comparable" or "equivalent" competence to that which would be gained from having the required education and experience. However, this may take the form of documentation other than "procedures and records of written test" such as documentation of oral tests and on-the-job performance demonstrations.

13a. N45.2.8, Sec 2.7

Requirement

Section 2.7 requires that personnel performing inspection and test activities be qualified according to ANSI N45.2.6.

Exception/Interpretation

See Exception/Interpretation 2j, 11a, and 12a. Test personnel who are part of the plant staff need not be certified to N45.2.6, provided they meet applicable qualification criteria of plant Technical Specifications.

13b. N45.2.8, Sec 2.9

Requirement

Section 2.9 establishes prerequisites which must be met before the installation, inspection and testing of mechanical equipment may proceed. These prerequisites include personnel and procedure qualification, control of design, material selection and fabrication, and availability of specified documents.

Exception/Interpretation

During the operations phase, this requirement is considered to be applicable to modifications of mechanical equipment. For routine or periodic inspection and testing, the prerequisites will be achieved as necessary.

13c. N45.2.8, Sec 2.9e

Requirement

Section 2.9e of N45.2.8 lists documents relating to the specific stage of installation activity which are to be available at the construction site.

Exception/Interpretation

All of the documents listed are not necessarily required at the plant site for installation and testing. Consumers Energy assures that they are available to the site as necessary.

13d. N45.2.8, Sec 2.9e

Requirement

Evidence that engineering or design changes are documented and approved shall be available at the construction site prior to installation.

Exception/Interpretation

Equipment may be installed before final approval of engineering or design changes. However, the system is not declared operable until such changes are documented and approved.

13e. N45.2.8, Sec 4.5.1

Requirement

"Installed systems and components shall be cleaned, flushed, and conditioned according to the requirements of ANSI N45.2.1 Special attention shall be given to the following requirements:...." (Requirements are given for chemical conditioning, flushing and process controls.)

Exception/Interpretation

Systems and components are cleaned, flushed and conditioned as determined on a case-by-case basis. Measures are taken to help preclude the need for cleaning, flushing, and conditioning through good practices during maintenance or modification activities.

14a. N45.2.9, Sec 5.4, Item 2

Requirement

Records shall not be stored loosely. They shall be firmly attached in binders or placed in folders or envelopes for storage on shelving in containers. Steel cabinets are preferred.

Exception/Interpretation

Records are suitably stored in steel file cabinets or on shelving in containers. Methods other than binders, folders or envelopes (for example, dividers or electronic media) may be used to organize the records for storage.

14b. N45.2.9, Sec 6.2

Requirement

"A list shall be maintained designating those personnel who shall have access to the files."

Exception/Interpretation

Rules are established governing access to and control of files as provided for in ANSI N45.2.9, Section 5.3, Item 5. These rules do not always include a requirement for a list of personnel who are authorized access. It should be noted that duplicate files and/or microforms exist for general use and backup.

14c. RG 1.88, C2

Requirement

"Two methods of protection of quality assurance records from the hazards of fire are described in Subdivision 5.6 of ANSI N45.2.9-1974. NFPA No 232-1975...also contains provisions for records protection equipment and records handling techniques that provide protection from the hazards of fire. This standard, within its scope of coverage, is considered by the NRC staff to provide an acceptable alternative to the fire protection provisions listed in Subdivision 5.6...When NFPA 232-1975 is used, quality assurance records should be classified as NFPA Class 1 records...."

Exception/Interpretation

Consumers Energy adheres to ANSI N45.2.9-1974, Subdivision 5.6 for the facility for permanent storage of non-duplicated records. Temporary storage of documents after completion and during processing as records is in file cabinets selected in accordance with provisions of NFPA 232-1975 for Class 1 records (usually NFPA Class C, 1 hour or UL-Class 350).

15a. RG 1.64, C2

Requirement

"Regardless of their title, individuals performing design verification should not (1) have immediate supervisory responsibility for the individual performing the design...."

Exception/Interpretation

Consumers Energy follows the requirements of ANSI N45.2.11-1974, Section G.1, and the guidance of Section 3E4(a) of the Standard Review Plan, with the exception that use of supervisors as design verifiers may be controlled by a procedure instead of individually approved in advance in each case (see Section 3.2.9, herein). This approach is necessary to allow small organizational units (having limited numbers of technically qualified staff, or having the only technically qualified staff available in the Company) the flexibility needed to most effectively accomplish their assigned tasks.

16a. RG 1.144, Sec C3a(1)

Requirement

This section requires that for operational phase activities, RG 1.33 "Quality Assurance Program Requirements (Operations)" are to be followed. One of the RG 1.33 requirements is that the results of actions taken to correct deficiencies that affect nuclear safety and occur in facility



equipment, structures, systems, or method of operation are to be audited at least once per six months.

Exception/Interpretation

See Item 3a for the exception to this requirement.

16b. RG 1.144, Sec C3a(2)

Requirement

Applicable elements of an organization's quality assurance program (for "design and construction phase activities") should be audited at least annually or at least once within the life of the activity, whichever is shorter.

Exception/Interpretation

Since most modifications are straightforward, they are not audited individually. Instead, selected controls over modifications are audited periodically.

16c. RG 1.144, Sec C3b(1)

Requirement

This section identifies procurement contracts which are exempted from being audited.

Exception/Interpretation

In addition to the exemptions of RG 1.144, Consumers Energy considers that Authorized Inspection Agencies, National Institute of Standards and Technology or other State and Federal Agencies which may provide services to Consumers Energy are not required to be audited.

16d. RG 1.144, Sec C.3.b(2), second paragraph

Requirement

A documented evaluation of the supplier should be performed annually. Where applicable, this evaluation should take into account (1) review of supplier-furnished documents such as certificates of conformance, non-conformance notices, and corrective actions, (2) results of previous source verifications, audits and receiving inspections, (3) operating experience of identical or similar products furnished by the same supplier, and (4) results of audits from other sources (e.g., customer, ASME or NRC Audits).

Exception/Interpretation

Consumers Energy will review the information described in the second paragraph of section C.3.b(2) of Regulatory Guide 1.144, Revision 1, 1980, as it becomes available through its ongoing receipt inspection, operating experience, and supplier evaluation programs, in lieu of performing a specific evaluation on an annual basis. The results of the reviews are promptly considered for effect on a supplier's continued qualification and adjustments made as necessary

(including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities as warranted). In addition, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action.

17a. N45.2.13, Sec 3.2.2

Requirement

N45.2.13 requires that technical requirements be specified in procurement documents by reference to technical requirement documents. Technical requirement documents are to be prepared, reviewed and released under the requirements established by ANSI N45.2.11.

Exception/Interpretation

For replacement parts and materials, Consumers Energy follows ANSI N18.7, Section 5.2.13, Subitem 1, which states: "Where the original item or part is found to be commercially 'off the shelf' or without specifically identified QA requirements, spare and replacement parts may be similarly procured, but care shall be exercised to ensure at least equivalent performance."

17b. N45.2.13, Sec 3.2.3

Requirement

"Procurement documents shall require that the supplier have a documented quality assurance program that implements portions all of ANSI N45.2 as well as applicable quality assurance program requirements of other nationally recognized codes and standards."

Exception/Interpretation

Refer to Item 21.

17c. N45.2.13, Sec 3.3(a)

Requirement

Reviews of procurement documents shall be performed prior to release for bid and contract award.

Exception/Interpretation

Documents may be released for bid or contract award before completing the necessary reviews. However, these reviews are completed before the item or service is put into service or before work has progressed beyond the point where it would be impractical to reverse the action taken.

17d. N45.2.13, Sec 3.3(b)

Requirement

"Changes made in the procurement documents as a result of the bid evaluations or precontract negotiations shall be incorporated into the procurement documents. The review of such changes and their effects shall be completed prior to contract award."

Exception/Interpretation

This requirement applies only to quality related changes (i.e., changes to the procurement document provisions identified in ANSI N18.7, Section 5.2.13.1, Subitems 1 through 5.) The timing of reviews will be the same as for review of the original procurement document.

17e. N45.2.13, Sec 7.5

Requirement

"Personnel responsible for performing verification activities shall be qualified in accordance with ANSI N45.2.6 as applicable."

Exception/Interpretation

Consumers Energy qualifies audit personnel according to N45.2.23. Thus, personnel performing source verification audits may not be certified according to N45.2.6. Personnel performing inspection as part of source verification will be certified to N45.2.6 or qualified in accordance with Paragraph 10.2.7. However, personnel performing source surveillances may not be certified to any of those requirements.

17f. N45.2.13, Sec 10.1

Requirement

"Where required by code, regulation or contract requirement, documentary evidence that items conform to procurement documents shall be available at the nuclear power plant site prior to installation or use of such items, regardless of acceptance methods."

Exception/Interpretation

Refer to Item 2m.

17g. N45.2.13, Sec 10.3.4 (as modified by RG 1.123, C6e)

Requirement

"Post-installation test requirements and acceptance documentation shall be mutually established by the purchaser and supplier."

Exception/Interpretation

In exercising its ultimate responsibility for its quality program, Consumers Energy establishes post-installation test requirements, giving due consideration to supplier recommendations.



18a. ANSI N45.2.23-1978, Section 2.3.4  
Requirement

The prospective lead auditor shall have participated in a minimum of five (5) quality assurance audits within a period of time not to exceed three (3) years prior to the date of qualification, one audit of which shall be a nuclear quality assurance audit within the year prior to his qualification.

Exception/Interpretation

The prospective lead auditor shall demonstrate his ability to properly implement the audit process defined by this Standard and Consumers Energy program/procedure, to effectively lead an audit team, and to effectively organize and report results, including participation in at least one nuclear quality assurance audit within the year preceding date of certification.

19a. RG 1.26, General

Requirement

RG 1.26 establishes a system for classifying pressure boundary items into four quality groups, which are then correlated with ASME B&PV Code and ANSI Standards requirements. (However, RG 1.26 does not indicate which of the four quality groups are safety-related, and which are not.)

Exception/Interpretation

RG 1.26 was used as a reference to establish piping system boundaries, but not for defining specific quality groups or making safety-related determinations. Regulatory Guide 1.29, subject to Exception/Interpretation 21a, is used to determine what systems and equipment are included in the Quality Program.

20a. Branch Technical Position AS99.5.1 and 10 CFR 50 Appendix R,  
Sections III G., III J., and III Q., General

Exception/Interpretation

Fire protection measures, equipment and the individual plant Fire Protection Plans are in compliance with the NRC Safety Evaluation Reports and the required sections of 10 CFR 50 Appendix R except for the specific exemptions approved by the NRC.

21a. RG 1.29, Sec C, Regulatory Position

Requirement

The Regulatory Position states that the identified structures, systems, and components are to be designated Seismic Category 1 and should be designed to withstand the SSE.

Exception/Interpretation

Both Consumers Energy nuclear plants (Big Rock Point and Palisades) were designed, constructed and licensed based on criteria available prior to Revision 3 of this Regulatory Guide being issued. The specific design criteria and seismic designations are reflected in the FFSR and FSAR, respec-

tively, and in other docketed analysis. Thus, the design bases and seismic designations do not correspond to those of Regulatory Guide 1.29.

The criteria of this Regulatory Guide are used at Consumers Energy primarily in the identification of systems, structures, and components to which the Quality Program is applied (see 21b, below).

21b. RG 1.29, General

Requirement

Apply pertinent Quality Assurance requirements of 10 CFR 50, Appendix B.

Exception/Interpretation

The pertinent quality requirements for these systems, structures and components will be determined in a graded manner using tools such as the plant specific Probabilistic Safety Assessment and the Technical Specifications, and other docketed analyses to determine the degree which Appendix B of 10 CFR 50 applies.

22. ANSI/ANS 3.1 - 1987

Exception/Interpretation

The commitment to ANSI/ANS 3.1-1987 is limited to requirements that apply to persons performing the independent safety review function as specified in Appendix C to this QPD.

QPD MANUAL  
APPENDIX B  
PLANT REVIEW COMMITTEE (PRC)

B1. FUNCTION

The Plant Review Committee (PRC) shall function to advise the Site Vice President/Plant General Manager on all matters related to nuclear safety.

B2. COMPOSITION

The Palisades PRC is composed of nine regular members. The qualification level for PRC members shall be at least equivalent to those described in Section 4.4 of ANSI N18.1-1971. The PRC shall include representatives from the Operations, Radiological Services, Maintenance and Engineering Departments. The Chairman, Alternate Chairmen, and members shall be designated in administrative procedures by the Site Vice President.

The Big Rock Point PRC is composed of nine regular members from the Big Rock Point staff. The PRC members shall meet or exceed the minimum qualifications described in Sections 4.2 and 4.4 of ANSI N18.1-1971 for comparable positions. The PRC shall include representatives from the Operations, Chemistry/Health Physics, Maintenance, Engineering, and Safety and Licensing Departments. The members shall be designated in administrative procedures by the Plant Manager who is the Chairman of the PRC. The Plant Manager shall also designate an Alternate Chairman in writing.

B3. ALTERNATES

Alternate members of the PRC shall be appointed in writing by the PRC Chairman to serve on a temporary basis. No more than two alternates shall participate as voting members at any one time in PRC activities.

B4. MEETING FREQUENCY

The PRC shall meet at least once per calendar month with special meetings as required.

B5. QUORUM

A quorum of the Palisades PRC shall consist of the Chairman or alternate and four members or alternates. A quorum of the Big Rock Point PRC shall consist of the Chairman or alternate Chairman and four members or alternates.

B6. RESPONSIBILITIES

The PRC shall be responsible for nuclear safety review of:

- a. All procedures and programs specified by the Technical Specifications and changes thereto, and any other procedures or changes thereto as determined by the Site Vice President/Plant General Manager to affect nuclear safety; all proposed tests or experiments that affect nuclear safety; all proposed changes or modifications to plant systems or equipment that affect nuclear safety.



- b. All proposed changes to Operating License and Technical Specifications.
- c. Results of investigations of all violations of the Technical Specifications. (A report shall be prepared covering evaluation and recommendations to prevent recurrence and be forwarded to the Vice President - NFHO and to the Manager, Nuclear Performance Assessment Department (NPAD)).
- d. Plant operations to detect potential safety hazards.
- e. Reports of special reviews and investigations as requested by the Site Vice President/Plant General Manager or NPAD.
- f. Site Emergency Plan and implementing procedures.
- g. All reportable events as defined in 10 CFR 50.72 and 50.73.
- h. All items identified under B9.3 below as significant to nuclear safety (Palisades only).
- i. Monthly reports from Safety/Design Review (Palisades only).
- j. Nuclear industry operating experience.
- k. Review of any accidental, unplanned or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Plant General Manager and to the Manager, Nuclear Performance Assessment Department (Big Rock Point only).

PRC review of the above items may be performed by routing, subject to the requirements of B7. below. The Palisades PRC may delegate review of item a. to Safety/Design Review staff, as described in B9. below.

#### B7. AUTHORITY

The PRC shall:

- a. Recommend in writing to the Site Vice President/Plant General Manager approval or disapproval of items considered under B6.a. through j. above.
- b. Render determinations in writing with regard to whether or not each item considered under B6.a, b, c, f (Palisades only) and h above constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Senior Vice President - Nuclear, Fossil, and Hydro Operations and to the Nuclear Performance Assessment Department of any disagreements between the PRC and the Site Vice President/Plant General Manager; however, the Site Vice President/Plant General Manager shall have responsibility for the resolution of such disagreements.

The PRC Chairman may recommend to the Site Vice President/Plant General Manager approval of those items identified in B6. above based on a routing review provided the following conditions

are met: (1) at least five PRC members including the Chairman and no more than 2 alternates, shall review the item, concur with determination as to whether or not the item constitutes an unreviewed safety question, and provide written comments on the item; (2) all comments shall be resolved to the satisfaction of the reviewers providing the comments; and (3) if the PRC Chairman determines that the comments are significant, the item (including comments and resolutions) shall be recirculated to all reviewers for additional comments.

The item shall be reviewed at a PRC meeting in the event that: (1) Comments are not resolved; or (2) the Site Vice President/Plant General Manager overrides the recommendations of the PRC; or (3) a proposed change to the Technical Specifications involves a safety limit, a limiting safety system setting or a limiting condition for operation; or (4) the item was reportable to the NRC.

B8. RECORDS

The PRC shall maintain written minutes of each PRC meeting and shall provide copies for Independent Safety Review.

B9. TECHNICAL SUPPORT FOR PALISADES PRC

The Safety/Design Review organization shall function to examine proposed changes in design or operation and such other matters as the Palisades PRC may assign to identify issues significant to nuclear safety and recommend nuclear safety improvements.

B9.1 The Safety/Design staff responsible for the review function shall be an experienced technical staff meeting the qualifications of Technical Specifications.

B9.2 The Safety/Design Review staff may provide nuclear safety review as delegated by Palisades PRC for:

- a. Procedures, programs and changes thereto identified in the Technical Specifications and any additional procedures and changes thereto identified by the Site Vice President as significant to nuclear safety.
- b. All proposed tests or experiments.
- c. All proposed changes or modifications to plant systems or equipment.
- d. The Site Emergency Plan and implementing procedures.

B9.3 The Safety/Design Review staff shall determine those issues significant to nuclear safety which require review by the Palisades Plant Review Committee from items considered under B9.2a. through d. above. For those items not referred to PRC, Safety/Design Review shall recommend in writing to plant management approval or disapproval of items considered under B9.2.

B9.4 Reports of Safety/Design Review activities pursuant to B9 shall be submitted monthly to PRC.

QPD MANUAL  
APPENDIX C  
INDEPENDENT SAFETY REVIEW

The following exceptions/interpretations in Appendix A, Part 2, are relevant to implementation of the requirements of this section of the QPD:

Appendix C                      Exceptions/Interpretations

2c, 2d, 2e, 2f, 2l

C1. FUNCTION

The Independent Safety Review Group (ISRG) shall function to provide independent review of activities in the areas of:

- a. Nuclear power plant operation
- b. Nuclear engineering
- c. Chemistry and radiochemistry
- d. Metallurgy
- e. Nondestructive testing
- f. Instrumentation and control
- g. Radiological safety
- h. Mechanical and electrical engineering
- i. Administrative controls and quality assurance practices
- j. Emergency Planning
- k. Training

C2. COMPOSITION

The ISRG shall include the Manager, NPAD, who reports to the Vice President - NFHO, and a full-time staff of persons reporting to the Manager, NPAD and designated as Nuclear Performance Specialists for the ISR function. The Manager, NPAD, and the Nuclear Performance Specialists shall meet or exceed the qualifications described in Section 4.7 of ANSI/ANS 3.1-1987. The ISRG shall have no direct responsibility for activities subject to its review.

C3. CONSULTANTS

If sufficient expertise is not available within the ISRG to review particular issues, the ISRG shall have the authority to utilize consultants or other qualified organizations for expert advice.

C4. RESPONSIBILITIES



#### C4.1 REVIEW

The ISRG shall review:

- a. The safety evaluations for: 1) changes to procedures, equipment or systems, and 2) tests for experiments completed under the provisions of 10 CFR 50.59 to verify that such actions do 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 to Technical Specifications or the Operating License.
- e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affects nuclear safety.
- g. All reportable events having nuclear safety significance.
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- i. Reports and meeting minutes of the Plant Review Committee.
- j. Fire Protection Program and Implementing Procedure Changes (Palisades only).
- k. Reports of audits performed as specified in Appendix D.

ISRG review of the subjects in C4 above shall be performed by an assigned Nuclear Performance Specialist selected on the basis of technical expertise relative to the subject being reviewed. If the assigned Nuclear Performance Specialist determines the need for interdisciplinary review, a committee consisting of the Manager, NPAD, or his designate, and at least four Nuclear Performance Specialists, shall be assigned. Such committee shall meet as conditions requiring interdisciplinary review arise, but no less than twice yearly.

#### C5 AUTHORITY

The ISRG shall report to and advise the Vice-President, NFHO, of significant findings associated with those areas of responsibility specified in C4 above and Appendix D, Audit Frequencies.

#### C6 RECORDS

Records of ISRG activities shall be maintained. Reports shall be prepared and distributed as indicated below:

- a. The results of reviews performed pursuant to C4 above shall be reported to the Vice-President, NFHO, at least monthly.
- b. A report assessing each plant's overall nuclear safety performance shall be provided to senior Consumers Energy management annually.

QPD MANUAL  
APPENDIX D  
AUDIT FREQUENCIES

D1. AUDITS

Audits of operational nuclear safety related activities are performed by the NPAD staff under the cognizance of Nuclear Performance Specialists. These audits encompass:

- a. The conformance of plant operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire facility staff at least once per 12 months.
- c. The performance of activities required by the Quality Program Description for Operational Nuclear Power Plants (CPC-2A) to meet the criteria of 10 CFR 50, Appendix B at least once per 24 months.
- d. The Site Emergency Plan and implementing procedures at least once per 12 months.
- e. The Site Security Plan and implementing procedures (as required by the Site Security Plan) at least once per 12 months.
- f. Any other area of plant operation considered appropriate by NPAD or the Vice President - NFHO.
- g. The plant Fire Protection Program and implementing procedures at least once per 24 months.
- h. An independent fire protection and loss prevention inspection and audit to be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- i. An inspection and audit of the fire protection and loss prevention program to be performed by an outside qualified fire consultant at intervals no greater than 3 years.
- j. Radiological environmental monitoring program and the results thereof at least once per 12 months.
- k. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months.
- l. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 24 months.

Audit reports encompassed by D1. above shall be forwarded to the Manager, NPAD, and Management positions responsible for the areas audited within thirty (30) days after completion of the audit.



QPD MANUAL  
APPENDIX E  
RECORD RETENTION

- E1. In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated:
- E2. The following records shall be retained for at least five years:
- a. Records and logs of facility operation covering time interval at each power level.
  - b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
  - c. All reportable events as defined in 10 CFR 50.72 and 50.73.
  - d. Records of surveillance activities, inspections and calibrations required by Plant Technical Specifications.
  - e. Records of changes made to the procedures required by Plant Technical Specifications.
  - f. Records of radioactive shipments.
  - g. Records of sealed source leak tests and results.
  - h. Records of annual physical inventory of all source material of record.
- E3. The following records shall be retained for the duration of the Facility Operating License:
- a. Record and drawing changes reflecting facility design modifications made to systems and equipment described in the Palisades Final Safety Analysis Report or Big Rock Point Final Hazards Summary Report.
  - b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
  - c. Records of quarterly radiation exposure for all individuals entering radiation control areas.
  - d. Records of gaseous and liquid radioactive material released to the environs.
  - e. Records of transient or operational cycles for those facility components designed for a limited number of transients or cycles.
  - f. Records of inservice inspections performed pursuant to Plant Technical Specifications.
  - g. Records of Quality Assurance activities required by the Quality Program Description.
  - h. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

- l. Records of meetings of the PRC and reviews performed by NPAD according to Appendix B and C.
- j. Records of monthly facility radiation and contamination surveys.
- k. Records of secondary water sampling and quality (Palisades only)
- i. Records of the service lives of all hydraulic and mechanical snubbers covered by Technical Specifications. This shall include the date at which the service life commences and associated installation and maintenance records (Palisades only).
- m. Records for environmental qualifications which are covered under the provisions of 10 CFR 50.49 (Big Rock Point only).
- n. Records of training and qualifications for members of the plant staff.
- o. Records of reactor tests and experiments.
- p. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM (Palisades only).

**ATTACHMENT 4**

**CONSUMERS ENERGY COMPANY  
BIG ROCK POINT PLANT  
DOCKET 50-155  
PALISADES PLANT  
DOCKET 50-255**

**CPC-2A, Revision 18 Change Matrix**



## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
1	1.1 POLICY (Page 1)	1.1 REQUIREMENTS (Page 1)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
2	1.1 (Page 1) Paragraph 1  Consumers Power Company (CPCo) is responsible for establishing and implementing the Quality Program, as described herein, for the operational phase of its nuclear power plants. Although authority for development and execution of some parts of the program is delegated to others, such as contractors and consultants, CPCo retains overall responsibility.	1.1 (Page 1) Paragraph 1  Consumers Energy is responsible for establishing and implementing the Quality Program, as described herein, for the operational phase of its nuclear power plants. Although authority for development and execution of some parts of the program is delegated to others, such as contractors and consultants, Consumers Energy retains overall responsibility.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
3	1.1 (Page 1) Paragraph 2  This section of the Quality Program Description (QPD) identifies the CPCo...	1.1 (Page 1) Paragraph 2  This section of the Quality Program Description (QPD) identifies the Consumers Energy...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
4	1.2.1 (Page 1) Paragraph 1  The President and Chief Executive Officer (see Figure 1 of Company Organization Charts) of CPCo is responsible for safe operation of CPCo nuclear power plants. Authority and responsibility for establishing and implementing the Quality Program for plant operations, maintenance and modifications is delegated through the Executive Vice President and Chief Operating Officer - Electric to the Vice President - Nuclear Operations. This delegation is formalized in a STATEMENT OF RESPONSIBILITY AND AUTHORITY signed by the President and Chief Executive Officer. Other quality-related functions are provided by other organizations as described herein.	1.2.1 (Page 1) Paragraph 1  The President and Chief Executive Officer (see Figure 1, Company Organization Chart) of Consumers Energy is responsible for safe operation of Consumers Energy nuclear power plants. Authority and responsibility for establishing and implementing the Quality Program for plant operations, maintenance and modifications is delegated through the Executive Vice President and Chief Operating Officer - Electric to the Senior Vice President - Nuclear, Fossil, and Hydro Operations. This delegation is formalized in a STATEMENT OF RESPONSIBILITY AND AUTHORITY signed by the President and Chief Executive Officer. Other quality-related functions are provided by other organizations as described herein.	Corporate name change and elevation of management position responsible for nuclear plant operations.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
5	1.2.2 (Page 2) Responsibility for Attaining Quality Objectives in the Nuclear Operations Organization	1.2.2 (Page 2) Responsibility for Attaining Quality Objectives at the Nuclear Plants	Organization/name change resulting from Item 4.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
6	1.2.2 (Page 2) Paragraph 1  The Vice President - Nuclear Operations is responsible to the Executive Vice President and Chief Operating Officer - Electric for operation and maintenance of CPCo nuclear power plants. Managers who report to the Vice President, NOD, are responsible for directing the performance of activities that affect safe plant operation and/or safety-related functions of structures, systems and components of the operating nuclear power plants in accordance with Quality Program requirements.	1.2.2 (Page 2) Paragraph 1  The Senior Vice President - Nuclear, Fossil, and Hydro Operations (NFHO) is responsible to the Executive Vice President and Chief Operating Officer - Electric for operation and maintenance of Consumers Energy nuclear power plants. Managers who report to the Vice President, NFHO, are responsible for directing the performance of activities that affect safe plant operation and/or safety-related functions of structures, systems and components of the operating nuclear power plants in accordance with Quality Program requirements.	Corporate name change and elevation of senior management position responsible for nuclear operations.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
7	1.2.2.a. (Page 2) Paragraph 1  The Palisades Plant General Manager (see Figure 2) is responsible to the Vice President, Nuclear Operations for operation and maintenance of the nuclear power plant in such a manner as to achieve compliance with Plant licenses, applicable regulations and the Quality Program. The Plant General Manager delegates to appropriate managers and staff personnel in his organization responsibility for carrying out applicable controls required by the Quality Program. Quality Program activities performed on the authority of the Plant General Manager include:	1.2.2.a. (Page 2) Paragraph 1  The Palisades Plant Site Vice President (see Figure 1) is responsible to the Senior Vice President, NFHO for operation and maintenance of the nuclear power plant in such a manner as to achieve compliance with Plant licenses, applicable regulations and the Quality Program. The Site Vice President delegates to appropriate managers and staff personnel in his organization responsibility for carrying out applicable controls required by the Quality Program. Quality Program activities performed on the authority of the Site Vice President include:	Elevation of senior management position responsible for Palisades Plant and nuclear plant operations.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
8	1.2.2.a. (Page 2) Paragraph 22  Performing reviews to advise the Plant General Manager on matters related to nuclear safety, as specified in Appendix B, Plant Review Committee.	1.2.2.a. (Page 2) Paragraph 22  Performing reviews to advise the Site Vice President on matters related to nuclear safety, as specified in Appendix B, Plant Review Committee.	Position name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
9	1.2.2.a. (Page 2) Not in Revision 17.	1.2.2.a. (Page 2) Paragraphs 23 through 34.	Site reorganization eliminated the Nuclear Services organization (see Item 20) and made the new Site Vice President responsible for these items.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
10	1.2.2.b. (Page 3) Paragraph 1  The Big Rock Point Plant Manager (see Figure 2) is responsible to the Vice President, Nuclear Operations for operation and maintenance of the nuclear power plant in such a manner as to achieve compliance with Plant licenses, applicable regulations and the Quality Program. The Plant Manager delegates to appropriate managers and staff personnel in his organization responsibility for carrying out applicable controls required by the Quality Program. Quality Program activities performed on the authority of the Plant Manager include:	1.2.2.b. (Page 3) Paragraph 1  The Big Rock Point Plant General Manager (see Figure 1) is responsible to the Senior Vice President, NFHO, for operation and maintenance of the nuclear power plant in such a manner as to achieve compliance with plant licenses, applicable regulations and the Quality Program. The Plant General Manager delegates to appropriate managers and staff personnel in his organization responsibility for carrying out applicable controls required by the Quality Program. Quality Program activities performed on the authority of the Plant General Manager include:	Position name changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
11	1.2.2.b. (Page 3) Paragraph 5  Modifying components, including procurement, installation, inspection and testing activities when assigned by the Plant Manager.	1.2.2.b. (Page 4) Paragraph 5  Modifying components, including procurement, installation, inspection and testing activities when assigned by the Plant General Manager.	Position name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
12	1.2.2.b. (Page 5) Paragraph 29  Performing reviews to advise the Plant Manager on matters related to nuclear safety, as specified in Appendix B. Plant Review Committee.	1.2.2.b. (Page 6) Paragraph 29  Performing reviews to advise the Plant General Manager on matters related to nuclear safety, as specified in Appendix B. Plant Review Committee.	Position name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
13	1.2.2.c. (Page 5)  The Manager, Nuclear Performance Assessment Department, (see Figure 2) is responsible for:	1.2.3 (Page 6) Renumbered  Titled "Responsibilities of the Nuclear Performance Assessment Department"	Renumbered section for clarity following organization and title changes. Retitled to be consistent with other sections.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.



## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
14	1.2.2.c. (Page 5) Paragraph 1  The Manager, Nuclear Performance Assessment Department, (see Figure 2) is responsible for:	1.2.3 (Page 6) Paragraph 1  The Manager, Nuclear Performance Assessment Department, (see Figure 1) is responsible to the Senior Vice President, NFHO, for:	Consolidation of two organization charts into one, and position name change. Reporting relationship not affected.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
15	1.2.2.c. (Page 5) Paragraph 8  Recommending to the Plant General Manager/Managers or the Vice President, Nuclear Operations that a plant be shut down if such action appears necessary.	1.2.3 (Page 6) Paragraph 8  Recommending to the Site Vice President, the Plant General Manager, or the Senior Vice President NFHO that a plant be shut down if such action appears necessary.	Position name changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
16	1.2.2.c. (Page 5) Paragraph 10  Review of performance trends associated with NOD activities including corrective actions.	1.2.3 (Page 6) Paragraph 10  Review of performance trends associated with nuclear plant activities including corrective actions.	Organization name replaced by functional name.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
17	1.2.2.c. (Page 6) Paragraph 13  Reporting audit findings relative to follow-up on corrective actions and the effectiveness of the Quality Program to CPCo Management.	1.2.3 (Page 6) Paragraph 13  Reporting audit findings relative to follow-up on corrective actions and the effectiveness of the Quality Program to Consumers Energy Management	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
18	1.2.2.c. (Page 6)  Not in Revision 17.	1.2.3 (Page 6) Paragraph 15  Facilitation of Self-Assessment and Quality Verification Programs (Palisades only).	Responsibility added per senior management directive.	Facilitation role does not interfere with auditing and independent assessment of plant actions. The Manager, NPAD, retains the required independence to effectively carry out his assessment role as required by Criterion I of 10 CFR 50, Appendix B.
19	1.2.2.c. (Page 6) Paragraph 15  In order to implement these responsibilities, the Manager, NPAD, is provided with "Stop Work" authority whereby he can suspend any quality related activity or process which may, in his opinion, adversely affect public safety or the safe operation Consumers Power nuclear plants...	1.2.3 (Page 7) Paragraph 16  In order to implement these responsibilities, the Manager, NPAD, is provided with "Stop Work" authority whereby he can suspend any quality related activity or process which may, in his opinion, adversely affect public safety or the safe operation of Consumers Energy nuclear plants...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
20	1.2.2.d. (Page 6) The General Manager, Nuclear Services...	(Page 7) Not in Revision 18. These duties have been added to the Site VP responsibilities.	Site reorganization eliminated the Nuclear Services organization (see Item 9) and made the new Site Vice President responsible for these items.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
21	1.2.3 (Page 7) Responsibilities for Attaining Quality Objectives in Fossil and Hydro Operations...	1.2.3 (Page 7) Not in Revision 18.	Combination of nuclear, fossil and hydro operations eliminated need for this title.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
22	1.2.3.a. (Page 7) The Manager, Equipment Services provides electrical, rotating and stationary equipment expertise, including developing and qualifying procedures for welding and heat treating.	1.2.4 (Page 7) Responsibilities of the Equipment Services Department The Manager, Equipment Services provides electrical, rotating and stationary equipment expertise, including developing and qualifying procedures for welding and heat treating.	Format change due to corporate reorganization that consolidated nuclear, fossil and hydro plant operations under one Senior Vice President.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
23	1.2.4 (Page 8) Responsibilities for Attaining Quality Objectives Outside Nuclear Operations and Fossil and Hydro Operations	1.2.5 (Page 7) Responsibility for Attaining Quality Objectives Outside Nuclear, Fossil, and Hydro Operations	Organization name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
24	1.2.4 (Page 8) Paragraph 1 Certain functions that constitute part of the Nuclear Operations Quality Program are performed by CPCo...	1.2.5 (Page 7) Paragraph 1 Certain functions that constitute part of the Nuclear Quality Program are performed by Consumers Energy...	Corporate name change only. Renumbered paragraph.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
25	1.2.3.b. (Page 7) The Director, Fuel Supply & Plant Operations maintains the Records Management System including required retention, protection and retrievability...	1.2.5.b. (Page 7) The Executive Manager, Fuels & Power Transactions is responsible to the Executive Vice President and Chief Operating Officer - Electric for maintaining the Records Management System including required retention, protection and retrievability...	Organization name and reporting relationship changes. No change in actual responsibilities.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
26	1.2.4.b. (Page 8)  The Director, Electric Employee Development (see Figure 1) is responsible to the Executive Vice President and Chief Operating Officer - Electric for operating the Skill Centers including the training, and qualifying of personnel and equipment for welding operations.	1.2.5.c. (Page 7)  The Manager, Production Services (see Figure 1) is responsible through the Vice President Electric Transmission and Distribution to the Executive Vice President and Chief Operating Officer - Electric for operating the Skill Centers including the training, and qualifying of personnel and equipment for welding operations.	Organization name and reporting relationship changes. No change to actual responsibilities.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
27	1.2.4.c. (Page 8)  The Corporate Records Administrator...	1.2.5.d. (Page 7)  Renumbered.	Renumbered paragraph.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
28	1.2.4.d. (Page 8)  The Manager, Environmental and Technical Services (E&TS)...	1.2.5.e. (Page 8)  The Manager, Environmental and Technical Services (E&TS)...	Renumbered paragraph.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
29	1.2.4.d. (Page 8) Paragraph 5  Providing a PL-M&TE Inventory List for Nuclear Operations.	1.2.5.e. (Page 8) Paragraph 5  Providing a PL-M&TE Inventory List for Nuclear plants.	Renumbered paragraph. Changed organization to functional wording.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
30	1.2.4.d. (Page 8) Paragraph 6  Providing chemistry support to Nuclear Operations, as requested.	1.2.5.e. (Page 8) Paragraph 6  Providing chemistry support to Nuclear plants, as requested.	Renumbered paragraph. Changed organization to functional wording.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
31	1.2.4.e. (Page 9)  The Manager, Electric Services is responsible, through...	1.2.5.f. (Page 8)  The Manager, Electric Services is responsible, through...	Renumbered paragraph.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
32	Figure 1 (Page 10) Corporate Organization	Figure 1 (Page 9) Corporate Organization	Revised to show title and organization changes described in Section 1.0.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
33	2.1 POLICY (Page 12)	2.1 REQUIREMENTS (Page 10)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.



## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
34	2.1 (Page 12) Paragraph 1  Policies that define and establish the Consumers Power Company (CPCo) Quality Program...	2.1 (Page 10) Paragraph 1  Policies that define and establish Consumers Energy Quality Program...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
35	2.1 (Page 12) Paragraph 3  Quality Program status, scope, adequacy and compliance with 10 CFR 50, Appendix B are regularly reviewed by CPCo Management...	2.1 (Page 10) Paragraph 3  Quality Program status, scope, adequacy and compliance with 10 CFR 50, Appendix B are regularly reviewed by Consumers Energy...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
36	2.1 (Page 12) Paragraph 4  <u>Paragraph</u> <u>Exceptions...</u> 2.2.3              20a, 20.b ... 2.2.6              1, 18a, 20a, 20b ...	2.1 (Page 10) Paragraph 4  <u>Paragraph</u> <u>Exceptions...</u> 2.2.3              21a, 21.b ... 2.2.6              1, 19, 21a, 21b ...	Renumbered exceptions due to change in Appendix A, Part 2.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
37	2.2.1 (Page 12)  The President of Consumers Power Company, as Chief...	2.2.1 (Page 10)  The President of Consumers Energy, as Chief...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
38	2.2.2 (Page 12)  The Quality Program at CPCo...	2.2.2 (Page 10)  The Quality Program at Consumers Energy...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
39	2.2.3.b. (Page 13)  The Quality Program described in this Quality Program Description is intended to apply for the life of CPCo's nuclear power plants.	2.2.3.b. (Page 11)  The Quality Program described in this Quality Program Description is intended to apply for the life of Consumers Energy's nuclear power plants.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
40	<p>2.2.4 (Page 13)</p> <p>This Quality Program Description, organized to present the CPCo Quality Program for Operational Nuclear Power Plants in the order of the 18 criteria of 10 CFR 50, Appendix B, states CPCo policy for each of the criteria and describes how the controls pertinent to each are carried out. Any changes made to this Quality Program Description that do reduce the commitments previously accepted by the NRC must be submitted to the NRC and receive NRC approval prior to implementation. The submittal of the changes described above shall be made in accordance with the requirements of 10 CFR 50.54.</p>	<p>2.2.4 (Page 11)</p> <p>This Quality Program Description, organized to present the Consumers Energy Quality Program for Operational Nuclear Power Plants in the order of the 18 criteria of 10 CFR 50, Appendix B, states Consumers Energy requirements for each of the criteria and describes how the controls pertinent to each are carried out. Any changes made to this Quality Program Description that do not reduce the commitments previously accepted by the NRC must be submitted to the NRC at least annually as specified by 10 CFR 50.71.e. Any changes made to this Quality Program Description that do reduce the commitments previously accepted by the NRC must be submitted to the NRC and receive NRC approval prior to implementation in accordance with the requirements of 10 CFR 50.54.</p>	Corporate name change. Added wording on annual submittal to more clearly address 10 CFR 50.54 and 10 CFR 71 requirements.	Addition of reference to 10 CFR 71 adds clarity. No other content or commitment changes. QPD continues to meet 10 CFR 50, Appendix B.
41	<p>2.2.5.b. (Page 13)</p> <p>When Contractors perform work under their own quality assurance programs, these programs are reviewed for compliance with the applicable requirements of 10 CFR 50, Appendix B and the contract, and are approved by CPCo prior to the start of work.</p>	<p>2.2.5.b. (Page 11)</p> <p>When Contractors perform work under their own quality assurance programs, these programs are reviewed for compliance with the applicable requirements of 10 CFR 50, Appendix B and the contract, and are approved by Consumers Energy prior to the start of work.</p>	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
42	<p>2.2.5.c. (Page 13)</p> <p>Applicable elements of the operations Quality Program are applied to emergency plans, security plans, radiation and fire protection plans for CPCo...</p>	<p>2.2.5.c. (Page 11)</p> <p>Applicable elements of the operations Quality Program are applied to emergency plans, security plans, radiation and fire protection plans for Consumers Energy...</p>	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
43	<p>2.2.6 (Page 14) Paragraph 2</p> <p>Appendix A to this Quality Program Description lists the ANSI Standards and Regulatory Guides to which CPCo commits...</p>	<p>2.2.f (Page 11) Paragraph 2</p> <p>Appendix A to this Quality Program Description lists the ANSI Standards and Regulatory Guides to which Consumers Energy...</p>	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
44	2.2.6.a. (Page 14) CPCo uses the criteria specified in Regulatory Guides 1.26 and 1.29 in engineering...	2.2.6.a. (Page 12) Consumers Energy uses the criteria specified in Regulatory Guides 1.26 and 1.29 in engineering...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
45	2.2.8 (Page 14) Development, control and use of computer programs affecting nuclear power plant design and operation at CPCo are subject...	2.2.8 (Page 12) Development, control and use of computer programs affecting nuclear power plant design and operation at Consumers Energy are subject...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
46	2.2.9 (Page 15) Responsibility and authority for planning and implementing indoctrination and training are specifically designated in the CPCo organization...	2.2.9 (Page 12) Responsibility and authority for planning and implementing indoctrination and training are specifically designated in the Consumers Energy organization...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
47	2.2.10 (Page 15) Status and adequacy of the quality program are regularly assessed by CPCo Management...	2.2.10 (Page 13) Status and adequacy of the quality program are regularly assessed by Consumers Energy Management...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
48	3.1 POLICY (Page 16)	3.1 REQUIREMENTS (Page 14)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
49	3.2.1 (Page 16) Authority and responsibility for modification activities is under the cognizance of the Nuclear Operations Department...	3.2.1 (Page 14) Authority and responsibility for modification activities is under the cognizance of the Nuclear Plants ...	Department organization change. Each plant was, and remains, its own "design authority."	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
50	3.2.5 (Page 17) ...Decisions and problem resolutions involving design interfaces are made by the CPCo organization having responsibility for engineering direction of the design effort.	3.2.5 (Page 15) ...Decisions and problem resolutions involving design interfaces are made by the Consumers Energy organization having responsibility for engineering direction of the design effort.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.



## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
51	3.2.7 (Page 17) Modification design document packages are reviewed by either Plant Engineering personnel or by Nuclear Engineering and Construction personnel to assure that the documents...	3.2.7 (Page 15) Modification design document packages are reviewed by Plant Engineering personnel to assure that the documents...	Reorganization eliminated the Nuclear Engineering and Construction department. Reviews are still performed by the design authority.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
52	4.1 POLICY (Page 19)	4.1 REQUIREMENTS (Page 17)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
53	4.2.3.e. (Page 19) A requirement for a documented Quality Program, subject to CPCo review and written concurrence prior to the start of work.	4.2.3.e. (Page 17) A requirement for a documented Quality Program, subject to Consumers Energy review and written concurrence prior to start of work.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
54	4.2.3.h. (Page 20) ...the schedule of submittals and identification of documents requiring CPCo approval.	4.2.3.h. (Page 18) ...the schedule of submittals and identification of documents requiring Consumers Energy approval.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
55	5.1 POLICY (Page 21)	5.1 REQUIREMENTS (Page 19)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
56	5.2 (Page 21) Paragraph 4 The procedures used by CPCo to control its activities include the following:	5.2 (Page 19) Paragraph 4 The procedures used by Consumers Energy to control its activities include the following:	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
57	5.2.15.c. (Page 23) Control of the interfaces between CPCo and its suppliers	5.2.15.c. (Page 21) Control of the interfaces between Consumers Energy and its suppliers	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 16	Reason for Change	Basis for Conclusion
58	5.2.15.d. (Page 23) Offsite management control	(Page 21) Not in Revision 18. old 5.2.15.e. renumbered as 5.2.15.d.	With reorganizations, management control of modifications rests onsite.	Procedures for controlling plant modifications must still meet all relevant requirements. There is no need to address offsite management control, since none is provided. This section continues to meet Criterion V of 10 CFR 50, Appendix B.
59	6.1 POLICY (Page 24)	6.1 REQUIREMENTS (Page 22)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
60	6.1.1 (Page 24) For Palisades, an appropriate senior department manager, based on the activities addressed in the specific procedure, predesignated in writing by the Plant General Manager; or	6.1.1 (Page 22) For Palisades, an appropriate senior department manager, based on the activities addressed in the specific procedure, predesignated in writing by the Site Vice President; or	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
61	6.1.2 (Page 24) For Big Rock Point, the Plant Manager.	6.1.2 (Page 22) For Big Rock Point, the Plant General Manager.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
62	7.1 POLICY (Page 26)	7.1 REQUIREMENTS (Page 24)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
63	7.1 (Page 26) Paragraph 2  <u>Paragraph</u> <u>Exceptions...</u> 7.2.2              Not in Revision 17	7.1 (Page 24) Paragraph 2  <u>Paragraph</u> <u>Exceptions...</u> 7.2.2              16d	Added reference to new exception recently approved by NRC memo dated April 18, 1997.	NRC memo stated the change was acceptable and the QPD "continues to meet the requirements of 10 CFR Part 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Bas'is for Conclusion
64	<p>7.2.2 (Page 26)</p> <p>CPCo qualifies suppliers by performing a documented evaluation of their capability to provide items or services specified by procurement documents. To remain qualified, suppliers involved in active procurements are reevaluated annually and are audited triennially. If an audit is acquired from an external source, the audit is evaluated prior to its use.</p>	<p>7.2.2 (Page 24)</p> <p>Consumers Energy qualifies suppliers by performing a documented evaluation of their capability to provide items or services specified by procurement documents. To remain qualified, suppliers involved in active procurements are evaluated continuously and are audited triennially. If an audit is acquired from an external source, the audit is evaluated prior to its use.</p>	<p>Corporate name change. Changed "annually" to "continuously" per new Exception/Interpretation 16d, approved by NRC on April 18, 1997.</p>	<p>NRC memo stated change from annual evaluations was acceptable, based on continuous monitoring/evaluation of supplier performance. NRC memo stated the QPD "continues to meet the requirements of 10 CFR Part 50, Appendix B."</p>
65	<p>8.1 POLICY (Page 29)</p>	<p>8.1 REQUIREMENTS (Page 26)</p>	<p>Change made for each section to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.</p>	<p>Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.</p>
66	<p>9.1 POLICY (Page 30)</p>	<p>9.1 REQUIREMENTS (Page 27)</p>	<p>Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.</p>	<p>Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.</p>
67	<p>9.2.1 (Page 30)</p> <p>Processes subject to special process controls at CPCo are those...</p>	<p>9.2.1 (Page 27)</p> <p>Processes subject to special process controls at Consumers Energy are those...</p>	<p>Corporate name change only.</p>	<p>Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.</p>
68	<p>9.2.7 (Page 30)</p> <p>The Nuclear Assessment Department audits/assesses special process activities, including qualification activities to assure they are satisfactorily performed.</p>	<p>9.2.7 (Page 27)</p> <p>The Nuclear Performance Assessment Department audits/assesses special process activities, including qualification activities to assure they are satisfactorily performed.</p>	<p>Provide proper department name (corrects typo).</p>	<p>Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.</p>



## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
69	10.1 POLICY (Page 31)	10.1 REQUIREMENTS (Page 28)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
70	10.2.3 (Page 32) ...The Plant General Manager/Manager is responsible for review and concurrence with plant training and qualification programs that are under his direct responsibility. For activities performed at Palisades that are under the cognizance of Nuclear Services, the Manager, Nuclear Projects and Construction is responsible for review and concurrence of such programs.	10.2.3 (Page 29) ...The Site Vice President/Plant General Manager is responsible for review and concurrence with plant training and qualification programs that are under his direct responsibility.	Position title change and elimination of the Nuclear Services Department. The Site Vice President now is responsible, as all site activities are under his direct control.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
71	10.2.7.b. (Page 33) The work is within the skills of CPCo personnel...	10.2.7.b. (Page 30) The work is within the skills of Consumers Energy personnel...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
72	10.2.10.a. (Page 33) The work is performed using the CPCo Quality Program and procedures.	10.2.10.a. (Page 30) The work is performed using the Consumers Energy Quality Program and procedures.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
73	11.1 POLICY (Page 34)	11.1 REQUIREMENTS (Page 31)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
74	12.1 POLICY (Page 36)	12.1 REQUIREMENTS (Page 33)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
75	12.2.4 (Page 36) CPCo uses a system of labels to be attached to...	12.2.4 (Page 33) Consumers Energy uses a system of labels to be attached to...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
76	13.1 POLICY (Page 38)	13.1 REQUIREMENTS (Page 35)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
77	14.1 POLICY (Page 39)	14.1 REQUIREMENTS (Page 36)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
78	15.1 POLICY (Page 40)	15.1 REQUIREMENTS (Page 37)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
79	16.1 POLICY (Page 42)	16.1 REQUIREMENTS (Page 39)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
80	17.1 POLICY (Page 43)	17.1 REQUIREMENTS (Page 40)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
81	18.1 POLICY (Page 45)	18.1 REQUIREMENTS (Page 42)	Change made for each section title to clarify that all parts of this QPD are requirements that must be met (as specified in cover letter and other sections). Clarification necessary to satisfy NRC reviewer comment that "Policy" could be interpreted as something less than a requirement.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
82	QPD Manual (Page 47) Appendix A, Part 1 Paragraph 1  The Consumers Power Company Quality Program complies with the regulatory...	QPD Manual (Page 44) Appendix A, Part 1 Paragraph 1  The Consumers Energy Quality Program complies with the regulatory...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
83	Appendix A, Part 1 - 3 (Page 47)  Regulatory Guide 1.8 - (9/80 Draft) - Personnel Qualification and Training - Endorses ANSI/ANS 3.1 - (12/79 Draft).	Appendix A, Part 1 - 3 (Page 44)  Regulatory Guide 1.8 - (9/80 Draft) - Personnel Qualification and Training - Endorses ANSI/ANS 3.1 - (12/79 Draft) (application limited as described in exceptions 4a and 5a of Appendix A, Part 2).	Clarifies limitation of commitment as described in exceptions. (Exceptions were always part of QPD, no change made in actual commitments.)	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
84	Appendix A, Part 1 - 22 (Page 48)  ANSI/ANS 3.1-1987, Section, Qualification, and Training of Personnel for Nuclear Power Plants application limited as described in Appendix C of this document).	Appendix A, Part 1 - 22 (Page 45)  ANSI/ANS 3.1-1987, Selection, Qualification, and Training of Personnel for Nuclear Power Plants (application limited as described in Appendix C of this document).	Corrects typo (missing parens).	N/A
85	QPD Manual (Page 49) Appendix A, Part 2  CPCO Exceptions to Operating Phase Standards and Regulatory Guides	QPD Manual (Page 46) Appendix A, Part 2  Consumers Energy Exceptions to Operating Phase Standards and Regulatory Guides	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
86	Appendix A, Part 2 (Page 49) 1. Paragraph 3  The CPCo commitment refers to the Regulatory Guides...	Appendix A, Part 2 (Page 46) 1. Paragraph 3  The Consumers Energy commitment refers to the Regulatory Guides...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
87	Appendix A, Part 2 (Page 49) 1. Paragraph 4  Imposition of these Regulatory Guides on CPCo suppliers...	Appendix A, Part 2 (Page 46) 1. Paragraph 4  Imposition of these Regulatory Guides on Consumers Energy suppliers...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.



## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
88	Appendix A, Part 2 (Page 49) 2. Paragraph 1  Consumers Power Company has established an organizational unit...	Appendix A, Part 2 (Page 46) 2. Paragraph 5  Consumers Energy has established an organizational unit...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
89	Appendix A, Part 2 (Page 49) 2a. Exception/Interpretation  Since CPCo has more than one nuclear unit...	Appendix A, Part 2 (Page 47) 2a. Exception/Interpretation  Since Consumers Energy has more than one nuclear unit...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
90	2h. (Page 52) Exception/Interpretation  CPCo considers that this requirement applies only to procedures...	2h. (Page 49) Exception/Interpretation  Consumers Energy considers that this requirement applies only to procedures...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
91	2h.c.1. (Page 52)  Appropriate* senior Palisades department manager predesignated by the Plant General Manager; or	2h.c.1. (Page 49)  Appropriate* senior Palisades department manager predesignated by the Site Vice President; or	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
92	2h.c.2. (Page 52)  The Big Rock Point Plant Manager.	2h.c.2. (Page 49)  The Big Rock Point General Manager.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
93	2h.(*) (Page 52)  Determination of the appropriate senior Palisades department manager is based on the activities addressed in the specific procedure, and will be predesignated in writing by the Palisades Plant General Manager.	2h.(*) (Page 49)  Determination of the appropriate senior Palisades department manager is based on the activities addressed in the specific procedure, and will be predesignated in writing by the Palisades Plant Site Vice President.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
94	2i. (Page 52) Paragraph 2  CPCo initiates appropriate corrective action when it is discovered...	2i. (Page 49) Paragraph 2  Consumers Energy initiates appropriate corrective action when it is discovered...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
95	2j. Exception... (Page 53)  Work that is within the skills of CPCo personnel...	2j. Exception... (Page 50)  Work that is within the skills of Consumers Energy personnel...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
96	2p. Exception... (Page 55) Maintenance and modification activities which are within the skills of CPCo maintenance personnel...	2p. Exceptions... (Page 52) Maintenance modification activities which are within the skills of Consumers Energy maintenance personnel...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
97	2q. Exception... (Page 55) CPCo uses the terminology "independent verification points" as...	2q. Exception... (Page 52) Consumers Energy uses the terminology "independent verification points" as...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
98	2r. Exception... (Page 56) At CPCo, equipment is returned to its normal operating status...	2r. Exception... (Page 53) At Consumers Energy, equipment is returned to its normal operating status...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
99	3b. Exception... (Page 57) Paragraph 1  Consistent with guidance presented in NRC letters dated March 29, 1983 (RLSpessard to JMTaylor) and January 30, 1984 (JGPartlow to RLSpessard), Consumer Power company interprets the commitment to...	3b. Exception... (Page 54) Paragraph 1  Consistent with guidance presented in NRC letters dated March 20, 1983 (RLSpessard to JMTaylor) and January 30, 1984 (JGPartlow to RLSpessard), Consumers Energy interprets the commitment to...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
100	3b. Exception... (Page 57) Paragraph 2  Consumers Power Company maintains a matrix that identifies...	3b. Exception... (Page 54) Paragraph 2  Consumers Energy maintains a matrix that identifies...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
101	4a. Exception... (Page 57) The commitment to ANS 3.1 (12/79, draft) is limited to the requirements that apply to the training and qualification of persons performing independent quality assurance functions, except for Lead Auditors. Lead auditors are trained and qualified to Regulatory Guide 1.146 (8/80)/ANSI 45.2.23-1978. Other personnel are trained and qualified as designated in plant Technical Specifications.	4a. Exception... (Page 54) The commitment to ANS 3.1 (12/79, draft) is limited to the requirements that apply to the training and qualification of persons performing independent quality assurance functions, except for Lead Auditors. Lead Auditors are trained and qualified to Regulatory Guide 1.146 (8/80)/ANSI 45.2.23-1978. Other personnel are trained and qualified as designated in plant Technical Specifications.	Change bar was placed on this item in error. No difference between Revisions 17 and 18.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
102	5b. Exception... (Page 58) CPCo understands that this requirement applies both to CPCo employees from another site and to contract personnel who are temporarily assigned to a nuclear power plant either as replacements for regular employees or to augment the staff during outages. CPCo employees...	5b. Exception... (Page 55) Consumers Energy understands that this requirement applies both to Consumers Energy employees from another site and to contract personnel who are temporarily assigned to a nuclear power plant either as replacements for regular employees or to augment the staff during outages. Consumers Energy employees...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
103	6a. Exception... (Page 58) CPCo certifies its inspectors...	6a. Exception... (Page 55) Consumers Energy certifies its inspectors...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
104	6c. Exception... (Page 59) CPCo sometimes uses other...	6c. Exception... (Page 56) Consumers Energy sometimes uses other...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
105	7c. Exception... (Page 60) Paragraph 1 Based on comparison of these statements to ANSI/ASME NQA-2 1983. CPCo believes the intent was to establish...	7c. Exception... (Page 57) Paragraph 1 Based on comparison of these statements to ANSI/ASME NQA-2 1983. Consumers Energy believes the intent was to establish...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
106	8a. Exception... (Page 62) Instead of the five-level zone designation system referenced in ANSI N45.2.3. CPCo bases...	8a. Exception... (Page 59) Instead of the five-level zone designation system referenced in ANSI N45.2.3. Consumers Energy bases...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
107	9b. Exception... (Page 63) All of the documents listed are not necessarily required at the plant site for installation and testing. CPCo assures that they are available to the site as necessary.	9b. Exception... (Page 59) All of the documents listed are not necessarily required at the plant site for installation and testing. Consumers Energy assures that they are available to the site as necessary.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.



## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
108	10a. Exception... (Page 63) This standard (N45.2.5) was written for the construction phase of nuclear power plants; as such, it presumes significant activity in the areas of concrete and structural steel which do not generally occur at an operating plant. At Consumers Power, persons...	10a. Exceptions (Page 60) This standard (N45.2.5) was written for the construction phase of nuclear power plants; as such, it presumes significant activity in the areas of concrete and structural steel which do not generally occur at an operating plant. At Consumers Energy, persons...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
109	10b. Exception... (Page 64) CPCo uses the requirements...	10b. Exception... (Page 60) Consumers Energy uses the requirements...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
110	12a. Exection... (Page 65) CPCo endorses this position...	12a. Exception... (Page 62) Consumers Energy endorses this position...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
111	12b. Exception... (Page 65) ...examination and test objectives, this is not construed by CPCo as requiring personnel...	12b. Exception... (Page 62) ...examination and test objectives, this is not construed by Consumers Energy as requiring personnel...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
112	13c. Exception... (Page 66) All of the documents listed are not necessarily required <u>at</u> the plant site for installation and testing. CPCo assures that they are available <u>to</u> the site as necessary.	13c. Exception... (Page 63) All of the documents listed are not necessarily required <u>at</u> the plant site for installation and testing. Consumers Energy assures that they are available <u>to</u> the site as necessary.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
113	14c. Exception... (Page 68) CPCo adheres to ANSI/N45.2.9-1974, Subdivision 5.6...	14c. Exception... (Page 65) Consumers Energy adheres to ANSI/N45.2.9-1974, Subdivision 5.6...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
114	15a. Exception... (Page 68) CPCo follows the requirements of...	15a. Exception... (Page 65) Consumers Energy follows the requirements of...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
115	<p>16c. Exception... (Page 69)</p> <p>In addition to the exemptions of RG 1.144, CPCo considers that Authorized Inspection Agencies, National Institute of Standards and Technology or other State and Federal Agencies which may provide services to CPCo are not required to be audited.</p>	<p>16c. Exception... (Page 66)</p> <p>In addition to the exemptions of RG 1.144, Consumers Energy considers that Authorized Inspection Agencies, National Institute of Standards and Technology or other State and Federal Agencies which may provide services to Consumers Energy are not required to be audited.</p>	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
116	<p>(Page 69)</p> <p>Did not appear in Rev 17.</p>	<p>16d. RG 1.144, Sec C.3.b(2), second paragraph (Page 65)</p> <p><u>Requirement</u> a documented evaluation of the supplier should be performed annually. Where applicable, this evaluation should take into account (1) review of supplier-furnished documents such as certificates of conformance, non-conformance notices, and corrective actions, (2) results of previous source verifications, audits and receiving inspections, (3) operating experience of identical or similar products furnished by the same supplier, and (4) results of audits from other sources (e.g., customer, ASME or NRC Audits).</p> <p><u>Exception/Interpretation</u> Consumers Energy will review the information described in the second paragraph of section C.3.b(2) of Regulatory Guide 1.144, Revision 1, 1980 as it becomes available through its ongoing receipt inspection, operating experience, and supplier evaluation programs, in lieu of performing a specific evaluation on an annual basis. The results of the reviews are promptly considered for effect on a supplier's continued qualification and adjustments made as necessary (including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities as warranted). In addition, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action.</p>	Exception submitted to and approved by NRC. Reference April 18, 1997 memo, Schaaf (NRC) to Bordine (Consumers Energy).	NRC approval letter stated "the proposed changes to CPC-2A are acceptable in that the quality assurance program continues to meet the requirements of 10 CFR Part 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
117	17a. Exception... (Page 69) For replacement parts and materials". CPCo follows ANSI N18.7...	17a. Exception... (Page 67) For replacement parts and materials. Consumers Energy follows ANSI N18.7...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50. Appendix B.
118	17e. Exception... (Page 71) Consumers Power qualifies audit personnel according...	17e. Exception... (Page 68) Consumers Energy qualifies audit personnel according...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50. Appendix B.
119	17g. Exception... (Page 71) In exercising its ultimate responsibility for its quality program, CPCo establishes...	17g. Exception... (Page 68) In exercising its ultimate responsibility for its quality program, Consumers Energy establishes...	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50. Appendix B.
120	18a. (Page 71) This is now 19a. New 18a. was not in Revision 17.	18a. ANSI N45.2.23-1978, Section 2.3.4 (Page 69) <u>Requirement</u> The prospective lead auditor shall have participated in a minimum of five (5) quality assurance audits within a period of time not to exceed three (3) years prior to the date of qualification, one audit of which shall be a nuclear quality assurance audit within the year prior to his qualification. <u>Exception/Interpretation</u> The prospective lead auditor shall demonstrate his ability to properly implement the audit process defined by this Standard and Consumers Energy program/procedure, to effectively lead an audit team, and to effectively organize and report results, including participation in at least one nuclear quality assurance audit within the year preceding date of certification.	Exception submitted to and approved by NRC. Reference April 18, 1997 memo, Schaaf (NRC) to Bordine (Consumers Energy).	NRC approval letter stated "the proposed changes to CPC-2A are acceptable in that the quality assurance program continues to meet the requirements of 10 CFR Part 50. Appendix B.
121	19a. (Page 72) Branch Technical Position...	20a. (Page 69) Renumbered.	Editorial.	Content and commitments not affected. QPD continues to comply with 10 CFR 50. Appendix B.
122	20a. (Page 72) RG 1.29 Sec C. Regulatory Position...	21a. (Page 69) Renumbered.	Editorial.	Content and commitments not affected. QPD continues to comply with 10 CFR 50. Appendix B.



## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
123	20b. (Page 72) RG 1.29. General...	21b. (Page 69) Renumbered.	Editorial.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
124	21. (Page 72) ANSI/ANS 3.1 - 1987	22. (Page 70) Renumbered.	Editorial.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
125	Appendix B (Page 73) B1. Function  The Plant Review Committee (PRC) shall function to advise the Plant General Manager/Manager on all matters related to nuclear safety.	Appendix B (Page 71) B1. Function  The Plant Review Committee (PRC) shall function to advise the Site Vice President/Plant General Manager on all matters related to nuclear safety.	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
126	B2. COMPOSITION (Page 73) Paragraph 1  ...The Chairman, Alternate Chairmen, and members shall be designated in administrative procedures by the Plant General Manager.	B2. COMPOSITION (Page 71) Paragraph 1  ...The Chairman, Alternate Chairmen, and members shall be designated in administrative procedures by the Site Vice President.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
127	B6.a. (Page 74)  All procedures and programs specified by the Technical Specifications and changes thereto, and any other procedures or changes thereto as determined by the Plant General Manager/Manager to affect...	B6.a. (Page 71)  All procedures and programs specified by the Technical Specifications and changes thereto, and any other procedures or changes thereto as determined by the Site Vice President/Plant General Manager to affect...	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
128	B6.e. (Page 74)  Reports of special reviews and investigations as requested by the Plant General Manager/Manager or NPAD.	B6.e. (Page 72)  Reports of special reviews and investigations as requested by the Site Vice President/Plant General Manager or NPAD.	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
129	B6.k. (Page 74)  ...forwarding of these reports to the Plant Manager and to the Manager, Nuclear Performance Assessment Department (Big Rock Point only).	B6.k. (Page 72)  ...forwarding of these reports to the Plant General Manager and to the Manager, Nuclear Performance Assessment Department (Big Rock Point only).	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
130	L7.a. (Page 75)  Recommend in writing to the Plant General Manager/Manager approval or disapproval of items considered under B6.a. through j. above.	B7.a. (Page 72)  Recommend in writing to the Site Vice President/Plant General Manager approval or disapproval of items considered under B6.a. through j. above.	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
131	B7.c. (Page 75)  Provide written notification within 24 hours to the Vice President - Nuclear Operations and to the Nuclear Performance Assessment Department of any disagreements between the PRC and the Plant General Manager/Manager; however, the Plant General Manager/Manager shall have responsibility for the resolution of such disagreements.	B7.c. (Page 72)  Provide written notification within 24 hours to the Senior Vice President - Nuclear, Fossil, and Hydro Operations and to the Nuclear Performance Assessment Department of any disagreements between the PRC and the Site Vice President/Plant General Manager; however, the Site Vice President/Plant General Manager shall have responsibility for the resolution of such disagreements.	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
132	B7. (Page 75) Paragraph 2  The PRC Chairman may recommend to the Plant General Manager/Manager approval of those items...	B7. (Page 72) Paragraph 2  The PRC Chairman may recommend to the Site Vice President/Plant General Manager approval of those items...	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
133	B7. (Page 75) Paragraph 3  The item shall be reviewed at a PRC meeting in the event that: (1) Comments are not resolved; or (2) the Plant General Manager/Manager overrides the...	B7. (Page 73) Paragraph 3  The item shall be reviewed at a PRC meeting in the event that: (1) Comments are not resolved; or (2) the Site Vice President/Plant General Manager overrides the...	Position title changes only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
134	B9.2.a. (Page 76)  Procedures, programs and changes thereto identified in the Technical Specifications and any additional procedures and changes thereto identified by the Plant General Manager/Manager as significant to nuclear safety.	B9.2.a. (Page 73)  Procedures, programs and changes thereto identified in the Technical Specifications and any additional procedures and changes thereto identified by the Site Vice President as significant to nuclear safety.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
135	Appendix C (Page 77) C2. COMPOSITION  The ISRG shall include the Manager, NPAD, who reports to the Vice President - NOD, and...	Appendix C (Page 74) C2. COMPOSITION  The ISRG shall include the Manager, NPAD, who reports to the Senior Vice President - NFHD, and...	Position title change only. No change in reporting relationship.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.

## CHANGE MATRIX

6/10/97

## QUALITY PROGRAM DESCRIPTION (CPC-2A)

## REVISION 18

Item	Revision 17	Revision 18	Reason for Change	Basis for Conclusion
136	C5. AUTHORITY (Page 78) The ISRG shall report to and advise the Vice-President, NOD, of significant findings associated with those areas of responsibility specified in C4 above and Appendix D. Audit Frequencies.	C5. AUTHORITY (Page 75) The ISRG shall report to and advise the Senior Vice-President, NFHO, of significant findings associated with those areas of responsibility specified in C4. above and Appendix D. Audit Frequencies.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
137	C6.a. (Page 78) The results of reviews performed pursuant to C4 above shall be reported to the Vice-President, NOD, at least monthly.	C6.a. (Page 76) The results of reviews performed pursuant to C4. above shall be reported to the Senior Vice-President, NFHO, at least monthly.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
138	C6.b. (Page 79) A report assessing each plant's overall nuclear safety performance shall be provided to senior Consumers Power Company management annually.	C6.b. (Page 76) A report assessing each plant's overall nuclear safety performance shall be provided to senior Consumers Energy management annually.	Corporate name change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
139	Appendix D (Page 79) D1.f. Any other area of plant operation considered appropriate by NPAD or the Vice President - Nuclear Operations.	Appendix D (Page 77) D1.f. Any other area of plant operation considered appropriate by NPAD or the Senior Vice President - NFHO.	Position title change only.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.
140	Appendix E (Page 81) E3.i. Records of meetings of the PRC and reviews performed by NPAD according to Appendix C.	Appendix E (Page 79) E3.i. Records of meetings of the PRC and reviews performed by NPAD according to Appendix B and C.	Provide reference to Appendix B as source for PRC activities.	Content and commitments not affected. QPD continues to comply with 10 CFR 50, Appendix B.