

Docket Nos.: 50-440
and 50-441

JUN 26 1985

Mr. Murray R. Edelman, Vice President
Nuclear Operation Group
The Cleveland Electric Illuminating Company
P. O. Box 5000
Cleveland, Ohio 44101

Dear Mr. Edelman:

Subject: Resolution of SER Confirmatory Issue (59) Regarding FSAR Amendment
Changes to Quality Assurance - Perry Nuclear Power Plant (Units 1
and 2)

The enclosed rewrite of Section 17.2 of the Perry SER is proposed for incorporation in the next SER supplement and resolves SER Confirmatory Issue (59), as well as all other questions in QA changes reflected in FSAR amendments thru Amendment 19. Should you have any questions or comments, please direct them to the project manager.

Sincerely

(S)

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Enclosure: As stated

cc: See next page

DISTRIBUTION:

Docket File

NRC PDR
Local PDR
PRC System
NSIC
LB#1 R/F
MRushbrook
JStefano
OELD
ACRS (16)
JPartlow

EJordan
w/o enclosures
BKGrimes
GTAnkrum, QUAB/IE
JLMilhoan, QUAB/IE
WLBelke, QUAB/IE
JSpraul, QUAB/IE

LB#1/DL
JStefano/mac
6/18/85

LB#1/DL *AWY to B.S.Y.*
BJYoungblood
6/18/85

8507100098 850626
PDR ADOCK 05000440
E PDR

QUALITY ASSURANCE
PERRY SSER17 QUALITY ASSURANCE

17.2 Quality Assurance During the Operations Phase

17.2.1 General

The description of the quality assurance (QA) program for the operations phase of Perry is contained in Section 17.2 of the FSAR. Evaluation of the Perry QA program is based on a review of this information and discussions with representatives of the applicant, the Perry Resident Inspector, and the NRC Region III Office. The staff assessed the applicant's QA program through Amendment 18 for the operations phase to determine whether it complies with the requirements of 10 CFR 50, Appendix B, the applicable QA-related Regulatory Guides listed in Table 17.1, and the Standard Review Plan (NUREG-75/087), Revision 1, Section 17.2, "Quality Assurance During the Operations Phase." This section supersedes all previous Section 17.2 statements on Perry Nuclear Power Plant.

Since this review effort, the Standard Review Plan was updated to Revision 2 (NUREG-0800). An additional review, conducted to determine the extent to which the applicant's QA program meets Revision 2, shows that the QA program complies with Revision 2, except for the following controls to which no clear commitment is provided.

The program does not specify:

- (1) criteria for determining the size of the QA organization, including the inspection staff (NUREG-0800, Section 17.1, item 1A5);
- (2) that the QA organization participates early in the QA program definition stage to determine and identify the extent to which QA controls are to be applied to specific structures, systems, and components. This effort involves applying a defined, graded approach to certain structures, systems, and components in accordance with their importance to safety and affects such disciplines as design, procurement, document control, inspection tests, special processes, records, audits, and others described in 10 CFR 50, Appendix B (NUREG-0800, Section 17.1, item 2B3, partial).
- (3) that procedures are established and described which require a documented check to verify the dimensional accuracy and completeness of design drawings and specifications (NUREG-0800, Section 17.1, item 3E1);
- (4) that program procedures provide criteria for determining the accuracy requirements of inspection equipment and criteria for determining when inspections are required or define how and when inspections are performed. The QA organization must participate in these functions (NUREG-0800, Section 17.1, item 10 A, partial).

As elaborated below, QA controls generally provide for increased involvement of the QA organization in certain quality-related activities and increase emphasis on the need for procedures, documentation, and requirements for other quality-related activities. As such, the staff believes that adequate QA controls in these areas are already included in the Perry QA program and that the additional items listed above (from NUREG-0800) need not be mandatory at this time.

17.2.2 Organization

The structure of the organization responsible for the operation of Perry and the establishment and execution of the operations-phase QA program is shown in Figure 17.1.

The Nuclear Group Vice President has the overall responsibility for the safe and reliable operation of the Perry plant. The Nuclear Quality Assurance Department Manager (NQADM), who reports directly to the Nuclear Group Vice President, has been delegated authority for establishing the QA program requirements, verifying their implementation, and measuring the overall effectiveness of the program. The NQADM, or designated alternate, has responsibility and authority to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming material during plant operation, maintenance, modification, construction, and inservice inspection. The Operations Quality Section, the Procurement and Administration Quality Section, the Construction Quality Section, the NQADM and the Audit Unit report directly to the NQADM.

The Operations Quality Section provides quality support and verification to the operating plant unit. Activities include (1) input to and review of safety-related work authorization, (2) procedures and corrective documents, (3) coordination of nondestructive examination support for inservice inspection, (4) inspection and maintenance and modification, and (5) maintenance of the operations QA Plan. The Procurement and Administration Quality Section (1) reviews and approves procurement documents; (2) maintains a program for approval, audit, and surveillance of suppliers; (3) performs receipt inspections; and (4) provides nondestructive examination service and administration support for the department. The Construction Quality Section is responsible for coordinating site quality functions associated with construction and providing QA coordination and support for outages during Unit 1 operation. The Audit Unit is responsible for providing a system of planned and periodic internal audits, and for effectively implementing this system.

The QA organization has the authority (1) to identify quality-affecting problems to initiate, recommend, or provide solutions through designated channels; (2) to verify implementation of solutions; (3) to stop unsatisfactory work; and (4) to control further processing, delivery, or installation of nonconforming items. It is also responsible for the following:

- (1) reviewing and concurring with documents (i.e., procedures and instructions) affecting safety
- (2) verifying surveillance of inplant activities
- (3) performing inspections and examinations associated with operations-phase activities
- (4) performing pre-award evaluation of suppliers, and surveillance, and inspection at supplier's facilities
- (5) assuring that personnel qualifications are current and applicable to the work being performed
- (6) assuring that corrective actions are effective and accomplished in a timely manner

- (7) conducting internal audits of maintenance, modification, and operations activities, and external audits of suppliers

The Nuclear Quality Assurance Department will also audit and supply instructors to the Nuclear Project Training organization of the Perry Project Services Department.

17.2.3 Quality Assurance Program

The QA program for the operation of Perry is described in Section 17.2 of the FSAR and is implemented by means of written policies, procedures, and instructions. The applicant has committed to follow the provisions of the applicable QA-related Regulatory Guides listed in Table 17.1. during the operations phase.

The QA organization is responsible for assuring that procedures and instructions completely and adequately satisfy QA requirements. In addition, QA personnel conduct reviews, inspections, and audits to verify the effective implementation of the QA program.

The applicant's QA program requires that implementing procedures and instructions encompass detailed controls for (1) translating codes, standards, regulatory requirements, Technical Specifications, and engineering and process requirements into drawings, specifications, procedures, and instructions; (2) developing, reviewing, and approving procurement documents, including changes; (3) prescribing all quality-related activities by documented instructions, procedures, drawings, and specifications; (4) issuing and distributing approved documents; (5) purchasing items and services; (6) identifying materials, parts, and components; (7) performing special processes; (8) inspection and testing of materials, equipment, processes, or services; (9) calibrating and maintaining measuring and test equipment; (10) handling, storing, and shipping of items; (11) identifying the inspection, test, and operating status of items; (12) identifying and correcting or disposing of nonconforming items; (13) correcting conditions adverse to quality; (14) preparing and maintaining quality assurance records; and (15) auditing activities that affect quality.

The indoctrination and training program established by the NQADM ensures that personnel performing activities affecting quality are knowledgeable in QA requirements, implementing procedures, and instructions and that they have competence and skill in the performance of their quality-related activities. The program provides for any necessary retraining of personnel performing quality-affecting activities.

Quality is verified through checking, review, surveillance, inspection, testing, and auditing of quality-related activities. The QA program requires that quality verification be performed by individuals who are not directly responsible for performing the quality-related activities. Inspections are performed by qualified personnel in accordance with procedures, instructions, and checklists approved by the QA organization.

The QA organization is responsible for the establishment and implementation of the audit program. Audits are performed in accordance with pre-established written checklists by qualified personnel not having direct responsibilities in the areas being audited. Periodic audits will be performed by the Nuclear Quality Assurance Department to evaluate all aspects of the QA program including

the effectiveness of the QA program implementation. The QA program requires that the person having responsibility in the area audited review the audit results and take any corrective action determined to be necessary. Followup audits are performed to determine that nonconformances and deficiencies are effectively corrected and that the corrective action precludes repetitive occurrences. Audit reports, which indicate performance trends and the effectiveness of the quality assurance program, are prepared and issued to responsible management for personnel review and assessment.

17.2.4 Conclusions

Based on its review and evaluation of the QA program description in Section 17.2 of the FSAR, the staff concludes:

- (1) The applicant's organization gives QA personnel sufficient independence from cost and schedule (when opposed to safety considerations), authority to effectively carry out the operations QA program, and access to management at a level necessary to perform the QA functions.
- (2) The QA program describes requirements, procedures, and controls that, when properly implemented, comply with the requirements of Appendix B to 10 CFR 50, and with the acceptance criteria contained in NUREG-75/087, Section 17.2, Revision 1.

Accordingly, the staff concludes that the applicant's description of the QA program, if properly implemented, is in compliance with applicable regulations.

Table 17.1 Regulatory Guides applicable to quality assurance program

Reg. Guide	Rev. no.	Date	Title
1.8	1-R	5/77	Personnel Selection and Training (draft)
1.26	3	2/76	Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants
1.29	3	9/78	Seismic Design Classification
1.30	-	8/11/72	Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electrical Equipment
1.33	2	2/78	Quality Assurance Program Requirements (Operation)
1.37	-	3/16/73	Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants
1.38	2	5/77	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants
1.39	2	9/77	Housekeeping Requirements for Water Cooled Nuclear Power Plants
1.58	1	9/80	Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel
1.64	2	6/76	Quality Assurance Requirements for the Design of Nuclear Power Plants
1.74	-	2/74	Quality Assurance Terms and Definitions
1.88	2	10/76	Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records
1.94	1	4/76	Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants
1.116	0-R	5/77	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems
1.123	1	7/77	Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants
1.144	1	9/80	Auditing of Quality Assurance Programs for Nuclear Power Plants
1.146	-	8/80	Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants

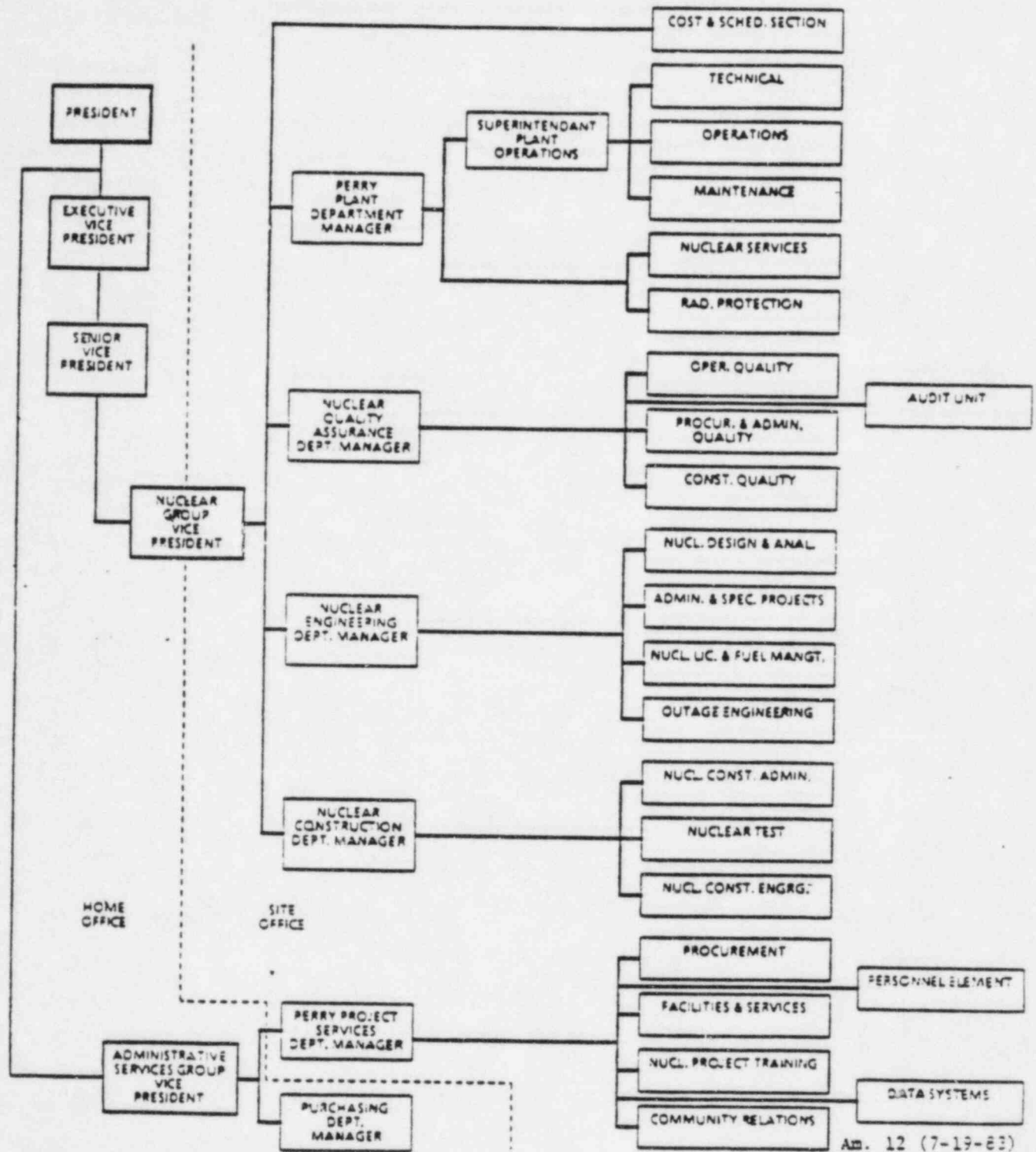


Figure 17.1 Perry Nuclear Power Plant project organization (Revision 1)

JUN 26 1985

Mr. Murray R. Edelman
The Cleveland Electric
Illuminating Company

Perry Nuclear Power Plant
Units 1 and 2

cc:
Jay Silberg, Esq.
Shaw, Pittman, & Trowbridge
1800 M Street, N. W.
Washington, D. C. 20006

Mr. Larry O. Beck
The Cleveland Electric
Illuminating Company
P. O. Box 97 E-210
Perry, Ohio 44081

Donald H. Hauser, Esq.
The Cleveland Electric
Illuminating Company
P. O. Box 5000
Cleveland, Ohio 44101

Resident Inspector's Office
U. S. Nuclear Regulatory Commission
Parmlly at Center Road
Perry, Ohio 44081

Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Donald T. Ezzone, Esq.
Assistant Prosecuting Attorney
105 Main Street
Lake County Administration Center
Painesville, Ohio 44077

Ms. Sue Hiatt
OCRE Interim Representative
8275 Munson
Mentor, Ohio 44060

Terry J. Lodge, Esq.
618 N. Michigan Street
Suite 105
Toledo, Ohio 43624

John G. Cardinal, Esq.
Prosecuting Attorney
Ashtabula County Courthouse
Jefferson, Ohio 44047