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March 29, 1976

Regulatory Docket Fill

Director of Nuclear Reactor Regulation Attn: Mr. Roger Boyd, Director Division of Project Management U.S. Nuclear Regulatory Commission Washington, DC 20555

MIDLAND PROJECT
DOCKET NUMBERS 50-329, 50-330
QA REGULATORY GUIDE RESPONSES
FILE: 0505.2 SERIAL: 2246





On October 15, 1975 we sent a letter to you containing proposed responsive positions relative to Regulatory Guides 1.28, 1.30, 1.37, 1.39, 1.58, 1.64, 1.74, 1.88 and 1.94 and draft ANSI N45.2 standards, N45.2.8, N45.2.12 and N45.2.13.

Subsequent to that submittal a meeting was held in Bethesda, Maryland on November 14, 1975 with members of the NRC staff and representatives of Consumers Power Company, Bechtel Associates Professional Corporation and Babcock and Wilcox Company. As a result of that meeting, Consumers Power decided to modify its submittal to incorporate the Consumers Power, Bechtel and Babcock and Wilcox QA topical reports with some alternatives and clarifications.

Attached to this letter is a proposed "Quality Assurance Program" description for the Midland Project. This program description incorporates the Consumers Power, Bechtel and Babcock and Wilcox QA Topical Reports subject to "effective dates". The following sections of the attached program description are still under development:

- A. Page 1, item #1 The Revision number and date of the Consumers Power QA Topical Report is not available because this topical report has not been approved by the NRC QA Branch.
- B. Sections I-G and I-K are not available because those alternates are being developed as "miscellaneous" Regulatory Guide positions. Upon resolution of the positions, they will be included in Sections I-G and I-K.
- C. Section III The "effectivity" dates are not available because these will have to be developed after concurrence is received from the NRC on the positions described in Sections I and II.

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D. Section IV - The exceptions which will be discussed in this section are not available because these exceptions will have to be defined after concurrence is received from the NRC on the position described in Sections I and II and after the "effectivity" dates of Section III are defined

Please review the attached proposed "Quality Assurance Program" description and provide an evaluation as to the acceptability of that description.

G. S. Keeley

Project Manager

GSK/HWS/fw

QUALITY ASSURANCE PROGRAM

Subject to those effectivity dates shown in Section III below, the Midland Project Quality Assurance Program will comply with the requirements of the following documents:

- For Consumers Power Activities;
 The Consumers Power Company Quality Assurance Program Manual (Topical Report No. CPC-1, Revision _____, dated _______)
- For Bechtel (Architect-Engineer, Constructor) Activities;
 Bechtel Quality Assurance Program for Nuclear Power Plants (Topical)
 Report No. BQ-TOP-1, Revision 1A, dated May 1, 1975)
- For Babcock and Wilcox (Nuclear Steam Supply System Supplier) Activities;
 B&W N.P.G.D. Quality Assurance Program for Nuclear Equipment (Topical Report No. BAW-10096A, Revision 1, dated March, 1975)

This compliance is subject to the following alternatives, interpretations, and exceptions:

I BECHTEL ALTERNATIVES AND INTERPRETATIONS

Note: Unless specifically noted otherwise all organizations, groups, and personnel discussed in this Section I are Bechtel organizations, groups, and personnel.

The following alternatives and interpretations apply to the implementation of the Bechtel QA Topical Report (BP-TOP-1):

A. Construction Work Procedures

The Bechtel Quality Assurance Topical (Section 1.5.4, page 12, paragraph 1) requires that "Construction Managers are responsible for the management and technical direction of assigned projects, and for assuring that construction projects are provided with appropriate personnel, and are following prescribed division practices and procedures for conduct of construction activities.

Chief Construction Engineers are responsible for providing division standard work procedures to the projects". The Topical (Section 1.5.2, page 11, subparagraph 3) further requires that the Quality Assurance Manager be responsible for "Approving quality related procedures and manuals prepared by departments and projects within his division for conformance to quality assurance policies".

In lieu of this requirement the Bechtel Midland Quality Assurance Program requires that Construction personnel perform their quality program related functions using either division standard work procedures prepared by Construction Engineering or project work procedures prepared by Project Field Engineering personnel. The final decision on which to use rests with the Project Field Engineer. All quality program related procedures used by Construction personnel are approved by Project Quality Assurance.

Project Field Engineering has already prepared and is in the process of preparing approximately 75% of the required construction work procedures.

Many of these work procedures were prepared prior to the existence and issue of procedures issued by the Division Chief Construction Engineer.

B. Review of Quality Control Instructions

The Bechtel Quality Assurance Topical (Section 1.6.1, page 14, subparagraph 13) requires that Project Quality Assurance "Review, prior to use,...Quality Control Instructions..."

In lieu of this requirement the Consumers Power Company Quality Assurance Topical Report requires that all Quality Control Instructions be reviewed and approved by Consumers Power Company Quality Assurance prior to use. This review implements the commitments for review described in Section 1.6.1 subparagraph 13 of the Bechtel Quality Assurance Topical.

The Bechtel Midland Quality Assurance Program also requires that this activity be audited by the Project Quality Assurance Engineer.

C. Titles

In the following cases, Midland Project organizations and personnel have titles differing from those in Bechtel Quality Assurance Topical Report but the responsibilities are the same.

Bechtel Quality
Assurance Topical Report
Title

Materials, Fabrication and Quality Control Services Department

Field Construction Manager

Project Construction Quality Control Engineer

Field Contracts Administrator

Division Chief Engineer

Midland Project Title

Materials and Quality Services
Department

Project Superintendent

Project Field Quality Control Engineer

Field Subcontracts Administrator

Cognizant Chief Engineer

D. Supplemental Interpretations of Regulatory Guide 1.37 (ANSI N45.2.1-1973)

Section 4 (Pre-Installation cleanliness) of ANSI N45.2.1 states "Items should not be delivered to the point of installation site sooner than necessary unless the installed location is considered a better storage area". In lieu of this requirement items might, in some cases, be delivered to the installation site sooner than necessary at the direction of the Project Field Engineer and will be protected in accordance with Section 5 of ANSI N45.2.1.

E. Supplemental Alternates and Interpretation of Regulatory Guide 1.38

(ANSI N45.2.2-1972)

The following alternates and interpretation apply to ANSI N45.2.2:

Section 2.7 Classification of Items. The listings in paragraph 2.7.1 through 2.7.4 will be used as a guide in determining the categorizing of items under levels A through D for the project. Categorization differing from Section 2.7 will be considered acceptable provided that no degradation in commodity quality is assured.

As in the case of electric motors, exterior pumps, and exterior valves, which are designed for outside service and could possibly be stored in areas other than those in which they are designated, i.e. outside service electric motors shown in Level B could possibly be placed in a Level C area.

The same would apply to exterior pumps and valves shown in Level C which could possibly be placed in a Level D area. In all cases however, the classifications shown in ANSI N45.2.2 will be reviewed and considered by field engineering.

- Section 2.7.4 Level D Classification. The last sentence 1st. paragraph is interpreted to read "These items require protection against the elements, airborne contamination, and physical damage as necessary and commensurate with the ultimate use of the item". This determination is made by Field Engineering in accordance with Project prepared and Project Quality Assurance approved procedures.
- 3) Section 6.2.2 Cleanliness and Housekeeping Practices in Storage Areas.
 Detrimental soil is defined as material or items which could degrade the stored material.
- F. Supplemental Alternates to Regulatory Guide 1.39 (ANSI N45.2-1973)
- of the five zones listed in this paragraph. These zones will provide the necessary cleanliness and will provide less confusion in the field. The requirements of zones I and II in the standard will be included in Zones A and B of the field procedure. The requirements of Zone III of the standard will be covered by including these items into Zone B or upgrading Zone C for the particular items. Zone IV will be included in Zone C except the restrictions on tobacco or eating is not required.

This zone can be upgraded to include these restrictions for particular items if necessary.

Zone V will be incorporated into Zones C or D as required.

Note:

Zone C provides no restriction except that the areas will be maintained free of detrimental scrap materials and will be swept regularly. Protective coverings will be utilized in work areas to minimize grease and oil spillage on finished surface. Zone D areas will be heavy construction areas without cleanliness restrictions and will be upgraded to Zone C when the heavy construction is completed.

Restriction List	Zones			
Clothing changes	A Yes	B No	C No	D No
Clean gloves, shoe covers, head covering	Yes	Yes	No	No
Filtered air	Yes	No	No	No
Material precleaning	Yes	No	No	No
Material accountability	Yes	Yes	No	No
Personnel accountability	Yes	Yes	No	No
No use of tobacco or eating	Yes	Yes	No	No

- 2) Para 2.2 Procedures and Instructions. This paragraph requires procedures for safety and fire regulations. The Project will use procedures which describe existing National State and Local codes and regulations to control safety and fire. NFPA is the national fire code followed at the site.
- Information to be provided after resolution as a "Miscellaneous" Regulatory Suide.

 Alternate to Regulatory Guide 1.58 (ANSI N45.2.6-1973)

The Regulatory Guide states that the provisions of ANSI N45.2.6-1973 are "generally applicable.....during fabrication prior to receipt of items

at the construction site". The project will not impose ANSI N45.2.6 on suppliers during fabrication prior to receipt of items at the construction site. Instead, the following activities are performed to ensure that offsite inspection, examination or testing is performed adequately. Bechtel procurement documents will require that the supplier's Quality Assurance program provide measures to assure that personnel performing safety-related inspections, examinations and tests are qualified to perform these activities. Such measures include procedures for qualification of personnel describing the minimum experience, training and proficiency testing required for qualification. The measures also include requirements for records documenting qualifications for each of the supplier's inspection, examination, and testing personnel. Personnel qualification procedures will be reviewed by Bechtel prior to initiation of inspections, examinations, or tests.

Also, Bechtel performs surveillance inspection at suppliers facilities by using inspectors qualified in accordance with ANSI N45.2.6. Quality Assurance audits are performed on suppliers and additionally, nondestructive examinations performed according to the quality requirements of Section III of the ASME Boiler and Pressure Vessel Code are performed by supplier personnel certified to SNT-TC-1A.

I. Supplemental Alternate to Regulatory Guide 1.64 (ANSI N45.2.11-1974)

Paragraph C-2, of the Regulatory Guide places restrictions on the use of the supervisor for design verification. As an alternate the following controls will be exercised. Design verification may be performed by the originator's supervisor if the supervisor is the only individual in the project team competent to perform the design verification. In such cases, an additional review will be performed by either the next higher level of supervision or by off-project personnel. These personnel are qualified in the area of design review and verification.

J. Alternate to Regulatory Guide 1.88 (ANSI N45.2.9-1974)

Section 5.6 of ANSI N45.2.9 requires that the permanent record storage facility have "structure, doors, frames, and hardware class A fire rated with a recommended four hour minimum rating". In lieu of this the existing Jobsite record storage facility has a two hour fire rating.

K. Alternates and Interpretations of Regulatory Guide 1.94 (ANSI N45.2.5-1974)

Information to be provided after resolution
as a "Miscellaneous" Regulatory Suide.

II BABCOCK AND WILCOX ALTERNATIVE

Appendix A, page A-8 of the B&W Topical Report relative to Regulatory Guide 1.88 reads as follows:

Future Compliance With Standards

ANSI N45.2.9 (Draft 11, Rev. 0; January 1973) "Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants," including AEC Regulatory Staff comments and supplementary guidance, Section D of

the Gray Book (Guidance on Quality Assurance Requirements During Design and Procurement Phase of Nuclear Power Plants, June 7, 1973).

B&W's current system for collecting, storing, and maintaining documents, described in section 6 of this report, is being upgraded to bring it into compliance with ANSI N45.2.9 by April 1975.

In lieu of the preceding, the following commitment will be implemented:

This guide endorses ANSI N45.2.9-1974, "Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants" for use in compliance with Criterion XVII of Appendix B to 10CFR50. The majority of such records are, of course, the responsibility of the plant owner and this guide should be considered in planning the QA record keeping system. For those records which are the responsibility of B&W, NPGD's Records Retention Program has been designed to comply with this Regulatory Guide.

III EFFECTIVITY DATES

The preceding commitments will be implemented on the following dates for all safety related activities relative to the Midland Project:

- A. For Consumers Power Activities; Date to be provided later.
- B. For Bechtel Activities; Date to be provided later.
- C. For Babcock and Wilcox Activities; Date to be provided later.

The preceding dates do not apply to those instances where the Midland plant design, procurement, fabrication or construction would have to be modified to conform to meet the preceding commitments. These instances are defined below.

IV EXCEPTIONS BASED ON THE NEED FOR MODIFICATION OF THE PLANT DESIGN, PROCUREMENT, FABRICATION OR CONSTRUCTION

This information to be provided later.

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