



Consumers
Power
Company

James W Cook
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January 14, 1982

Mr J G Keppler, Regional Director
Office of Inspection & Enforcement
US Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND PROJECT -
INSPECTION REPORT NOS 50-329/81-12 AND 50-330/81-12
FILE 0.4.2 SERIAL 15256

Reference: 1) NRC letter, C E Norelius to J W Cook, dated
December 3, 1981

This letter, including the attachment, provides Consumers Power Company's response to Reference 1. Our response was requested to be within 25 days of receipt of Reference 1. The delay beyond that date, January 1, 1982, was to permit full coordination with the responsible Region III personnel and has been with their understanding and concurrence.

Consumers Power Company

By

James W Cook

Sworn and subscribed to before me on this 14th day of January, 1982.

Notary Public, Midland County, Michigan
My commission expires Dec. 7, 1983

GARY A. SIMONEAU
Notary Public, Midland County, Mich.
My Commission Expires Dec. 7, 1983

CC: RJCook, NRC Resident Inspector
Midland Nuclear Plant

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CONSUMERS POWER COMPANY'S RESPONSE TO
US NUCLEAR REGULATORY COMMISSION, REGION III
LETTER DATED DECEMBER 3, 1981
DOCKET NUMBERS 50-329 AND 50-330

1. Paragraph 1 of the Region III letter of December 3, 1981, requests clarification of two issues.

a. Paragraph 1a of this letter states:

Field alteration of piping support and restraint installations subsequent to QC inspection and sign off has not been clearly addressed. Identification and correction of problems during final system walk-down prior to preoperational and/or startup tests should be the exception, not the rule. Your QA program should include measures to protect systems from damage and alterations after final acceptance by quality control

CONSUMERS POWER COMPANY'S RESPONSE

We regret that there was an editorial error which made it appear that we were not being fully responsive to your concern regarding field alteration of piping support and restraint installations subsequent to QC inspection and sign off. In the third paragraph on page two of the attachment to the October 30, 1981 letter, as a part of our response to Violation Item 4, we referenced "Item 6 in your Notice of Violation". We should have referenced Item 3. We apologize for the confusion this editorial error must have caused you.

Our response to Item 3, transmitted on August 7, 1981, stated:

Bechtel Construction has developed Administrative Guidelines addressing rework. The Administrative Guidelines provide reference to particular field procedures and outline the means of administratively processing rework information such that proper notifications and coordination are attained. Bechtel Quality Control has also developed Administrative Instructions to indicate the process followed for processing rework items.

It is noted that the above-referenced Administrative Guidelines and Instructions have been developed for Civil, Instrumentation, Mechanical and Electrical disciplines, and these actions in the Mechanical area are considered responsive to Unresolved Item 329/81-12-15 and 330/81-12-16 concerning procedural provisions to control design revisions on small bore piping and piping suspension systems. In the Mechanical area, the guidelines have been issued and revisions to the appropriate Mechanical procedures have been made and are expected to be issued for use by August 12, 1981.

The definition of rework as used in these guidelines and procedures includes both the removal of an accepted installation for the purpose of accomplishing a design change on it, and temporary removal of an accepted installation simply to accomodate construction congestion. These guidelines and procedures have now been released and are being implemented. This action should preclude unauthorized rework subsequent to QC inspection and sign off.

b. Paragraph 1b of the Region III letter states:

Your response states, "Project Engineering has been requested to evaluate the conditions represented by Items e, g, and h." What consideration has been given to the possibility that field installation was carried out without a clear understanding of the design requirements and related interpretations?

CONSUMERS POWER COMPANY'S RESPONSE

With respect to Item e, Bechtel Project Engineering was asked to consider whether or not the pipe hanger and restraint installation tolerances given in Specification 7220-M-326(Q) are in conformance with the design requirements. In response to this question, Bechtel Project Engineering stated that there is only a minimum installation clearance requirement and that there is no maximum installation clearance requirement, unless specified on the drawing. There is a fabrication interfacing dimensional constraint, which when met, results in an acceptable maximum installation clearance. This dimensional constraint is verified at the time of fabrication. When the minimum installation clearance and the fabrication dimensional requirements are met, design stresses will not be exceeded.

Based on this Project Engineering response, we conclude that the tolerances are in conformance with the design requirements. Furthermore, we have verified that the Bechtel QC inspections and the MPQAD overinspections are being performed with the full understanding of the tolerances as set forth above. Finally, since it appears the circumstances concerning this item should have raised some question as to the proper interpretation of the pertinent design requirements, it has been reemphasized to all QA/QC personnel that, any time such a question or doubt arises, they are to promptly seek written direction from Project Engineering.

With respect to Items g and h, Bechtel Project Engineering was asked to consider whether or not the Technical Specification is an adequate and complete statement of the design requirements. In response to this question, Bechtel Project Engineering stated that the strength of grouted anchor bolts is controlled by the bond strength between the grout and the concrete interface. The strength of the concrete cone pull-out, calculated per ACE 349-81, Appendix B, is approximately three times the design strength of the grout-to-concrete interface. Therefore, small holes drilled within this concrete cone will not have a detrimental effect until the potential pull-out surface of that concrete cone is reduced by approximately two thirds. Based on this Project Engineering response, we conclude that the design requirements as currently stated in the Technical Specification are adequate. The occurrence of abandoned holes in the proximity

of a single grouted-in anchor bolt in such numbers that they would reduce the pull-out area of the concrete cone around the bolt by two-thirds seems highly improbable. Nevertheless, to preclude even the remotest possibility of such an occurrence, Project Engineering will revise the Technical Specification to incorporate their response to our question.

2. Paragraph 2 of the Region III letter states:

Our letter dated September 16, 1981, requested that you provide a date when full compliance was or will be achieved for each of the eight items of noncompliance. While your additional response for Items 4, 5 and 8 satisfied our request, you failed to provide a date for the other items.

CONSUMERS POWER COMPANY'S RESPONSE

The dates for which we were in full compliance are as follows:

- a. Item 1 - December 31, 1981
- b. Item 2 - December 31, 1981
- c. Item 3 - November 24, 1981
- d. Item 6 - August 5, 1981
- e. Item 7 - May 29, 1981