# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

DOCKET NOS: 50-329 and 50-330

APPLICANT: Consumers Power Company

FACILITY: Midland Plant, Units 1 and 2

SUMMARY OF MEETING ON REGULATORY GUIDES (STRUCTURAL)

On September 24, 1975, members of the NRC staff met in Bethesda, Maryland with representatives of Consumers Power Company (CPC), Bechtel Associates Professional Corporation (Bechtel) and Babcock & Wilcox Company (B&W). An attendance list is attached.

The purpose of this meeting was to discuss the degree of conformance of the Midland plant to certain Regulatory Guides pertaining to structural engineering. The applicant's comments on Regulatory Guides 1.10, 1.15, 1.18, 1.19, 1.27, 1.35, 1.55, 1.57, 1.59, 1.60, 1.61, 1.90 and 1.92 had been forwarded to the staff on August 28, 1975 and the staff's reaction to these comments were discussed. The staff will request additional information that was not available at this meeting.

1.10 Mechanical (Cadweld) Splices in Reinforcing Bars of Category I Concrete Structures

The staff did not concur with the applicant's interpretation. Additional information will be requested.

1.15 Revision 1 (12/28/72) - Testing of Reinforcing Bars For Category

I Concrete Structures

The staff did not concur in alternative use of rejected material in Category I structures. Additional information will be requested.

1.18 Revision 1 (12/28/72) - Structural Acceptance Test For Concrete Primary Reactor Containments

Resolution of this item is dependent on whether the Midland containment building is classified as a prototype and whether accurate data can be obtained during a continuous pressure increase rather than during pressure hold periods. Additional information will be requested.

1.19 Revision 1 (8/11/72) - Nondestructive Examination of Primary Containment Liner Welds

The staff had previously found the applicant's methods acceptable. (Letter A. Schwencer to Consumers Power dated January 8, 1974).

1.27 Revision 1 (3/74) - Ultimate Heat Sink for Nuclear Power Plants

The staff had questions regarding the liquefaction potential of soils under the emergency cooling pool and service water piping. Also, it was decided that the staff should perform an independent calculation of the heat removal capability of the ultimate heat sink. Additional information will be requested.

1.35 Revision 1 (6/74) - Inservice Inspection of Ungrouted Tendons in Prestressed Concrete Containment Structures

Conformance with this guide is described in Bechtel topical report BC-TOP-5A Revision 3 that has been approved by the NRC staff.

1.55 Concrete Placement in Category I Structures (June, 1973)

It was not clear whether shop drawings were reviewed by the designers or how proper detailing of "critical areas" was communicated from the designer to the field office. Additional information will be requested.

1.57 Design Limits and Loading Combinations for Metal Primary Reactor Containment System Components (June 1973)

It was agreed that this guide does not apply to the Midland plant because the containment building is considered a concrete structure and not a metal structure.

1.59 Revision 0 (8/73) - Design Basis Floods for Nuclear Power Plants

There was general agreement with the applicant's application of this guide. However, additional information will be requested regarding flood levels and methods of waterproofing.

1.60 Revision 1 (12/73) - Design Response Spectra for Seismic Design of Nuclear Power Plants

The staff concurred with the applicant's application of this guide.

1.61 Revision 0 (10/73) - Damping Values for Seismic Design of Nuclear Power Plants

The staff concurred with the applicant's application of this guide.

1.90 Inservice Inspection of Prestressed Concrete Containment Structures with Grouted Tendons

Because the Midland containment building does not contain grouted tendons, this guide is not applicable.

1.92 Combinations of Modes and Spatial Components in Seismic Response Analysis (December 1974)

Since individual modes were combined by the absolute sum rather than the square root of the sum of the squares, the Midland design is considered more conservative than that intended by this guide.

Regulatory Guide 1.12 "Instrumentation for Earthquakes" was also discussed briefly. The applicant will provide additional information.

Most of the applicant's comments on the applicability of these guides were generic in nature and were not indicative of reduced applicability to the Midland Plant.

S. D. MacKay, Project Manager Light Water Reactors Branch 2-3 Division of Reactor Licensing

Enclosure: Attendance List

cc: Mr. J. D. Phillips
Mr. Horace Jewell
Mr. William Cavanaugh, III
Philip K. Lyon, Esquire

#### ATTENDANCE LIST

#### MIDLAND MEETING

## SEPTEMBER 24, 1975

### CONSUMERS POWER COMPANY

- R. Bauman
- E. Van Hoof
- C. A. Hunt

### BABCOCK & WILCOX COMPANY

- C. E. Mahaney
- J. S. Shively
- G. W. Delaney

## BECHTEL ASSOCIATES PROFESSIONAL CORPORATION

- G. A. Tuveson
- M. Elgaahy
- J. L. Hurley

#### NRC-STAFF

- c. MacKay
- R. E. Lipinski
- K. Kapur
- W. Pike
- M. Kehnemuyi
- H. George
- W. Belke
- G. Arndt
- G. Turi
- J. Greeves
- E. Hawkins

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R. Culp

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