



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

May 1, 1976

Docket Nos. 50-329
50-330

Midland

Karl Kniel, Chief, Light Water Reactors Branch 2, DPM

MEETING WITH CONSUMERS POWER COMPANY

Time and Date: 9:00 AM, Friday, 21 May 1976

Location: Room P-114, Phillips Building,
Bethesda, Md.

Purpose: Discussion of criteria to be
used for the analysis of high-
energy line breaks. See
attached agenda.

Participants: CPGCo (R. Bauman, et al)
NRC (L. Crocker, W. LeFave,
J. Kovacs)

L. P. Crocker
Senior Project Manager
Light Water Reactors Branch 2
Division of Project Management

Enclosure:
As stated

PROPOSED HIGH ENERGY LINE BREAK ANALYSIS

MEETING AGENDA

I. Interpretation of piping runs, branch runs, and terminal end points

We propose that piping runs and branch runs for piping inside and outside containment be treated as a total piping system between fixed points (anchors) since the stress analysis performed considers it as such. We perform thermal, dead weight, and seismic stress analyses for the total system including branch lines (within anchors). The analysis considers all of the stress intensification factors and flexibility factors as applicable to various piping components. Thus, we propose that breaks be postulated within the system as follows:

1. Terminal end points (anchors)
(Branch connections to main piping are not considered as terminal ends.)
2. At all points which exceed the stress criteria of R.C. 1.46
(As a minimum, two (2) intermediate breaks will be selected for each piping system, [main and branch lines within anchors])

II. Longitudinal slot breaks at terminal end points

We propose that longitudinal slot breaks not be postulated to occur at terminal end points for piping without longitudinal welds. This proposal is in accordance with Section 3b(2)(a) of the Branch Technical Position MLE 3-1 and should be a reasonable assumption for Midland Units 1 and 2 both inside and outside of containment.

III. Longitudinal slot breaks at intermediate locations

We propose that longitudinal slot breaks not be postulated to occur at intermediate locations where the Regulatory Guide 1.46 criterion for a minimum number of break locations must be satisfied. This proposal is in accordance with section 3b(2)(b) of the Branch Technical Position MLE 3-1 and should be a reasonable assumption for Midland Units 1 and 2 both inside and outside containment.

IV. Discussion of item 3 of A. Schwencer (NRC) to S. Howell (CPCo) letter of October 10, 1974, pertaining to Amendment 25 to the Midland PSAR.

V. Moderate Energy Analysis

Based on agreements reached in the meeting with the NRC on September 11, 1973, it is our understanding that moderate energy analysis is not required for Midland.

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Alan S. Rosenthal, Chairman
Dr. John H. Buck, Member
William C. Parler, Member

In the Matter of
CONSUMERS POWER COMPANY
(Midland Plant, Units 1 and 2)

Docket Nos. 50-329
50-330

Mr. Harold F. Reis, Washington, D. C., for the applicant, Consumers Power Company.

Messrs. Myron M. Cherry and Robert Graham, Chicago, Illinois, for the Saginaw Intervenors (Saginaw Valley Nuclear Study Group, *et al.*).

Mr. Howard J. Vogel, Minneapolis, Minn., for the Mapleton Intervenors (Nelson Aeschliman, *et al.*).

Mr. Milton R. Wessel, New York, N. Y. (Mr. James N. O'Conner, Midland, Mich., with him on the brief), for the Intervenor, Dow Chemical Company.

Mr. David E. Kartalia, for the AEC Regulatory Staff.

DECISION

(ALAB-123)

On December 14, 1972, the Licensing Board issued an initial decision, authorizing the issuance of construction permits to the Consumers Power Company (applicant) for the Midland Plant, Units 1 and 2. Before us are separate sets of exceptions to that decision which were filed by the Mapleton and Saginaw Intervenors, as well as a Motion of the Saginaw Intervenors dated March 28, 1973, seeking to supplement the record on appeal with certain "newly discovered information."

We have heretofore considered and ruled on two of the Saginaw Intervenors' exceptions which we regarded as raising questions which should be decided prior to our resolution of the remaining issues encompassed by the myriad of exceptions filed. In ALAB-101, RAI-73-2 60 (February 20, 1973), we denied the Saginaw Intervenors' exception VI. B, insofar as it sought to disqualify the members of the Licensing Board because of alleged bias or prejudgment. Subsequently, in ALAB-106, RAI-73-3 182 (March 26, 1973), we disposed of the issue which had been raised with respect to quality assurance and quality control in Saginaw Intervenors' exception III. F. We now turn to the remaining issues.

An adequate description of the reactor under consideration, and of the procedural background against which we are responding to various exceptions, appears in ALAB-106. *supra*, and need not be here reiterated. Following our issuance of ALAB-106, the Saginaw Intervenors on March 28, 1973, filed with this Board a Motion and Supplement to their previously filed exceptions, seeking to supplement the record on appeal with "newly discovered information." That information consisted of a letter from the Advisory Committee on Reactor Safeguards (ACRS) to the AEC Chairman dated December 18, 1972, and a responsive letter dated February 3, 1973, both concerning the generic resolution of certain issues relating to the safety of light-water cooled reactors. The applicant and staff opposed the motion on grounds of lack of timeliness and of nonrelevance. While it is not clear exactly when the Saginaw Intervenors became aware, or should have become aware, of the exchange of correspondence, the letters in question are possibly relevant

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Intervenors further complain that the letters and bulletin had not been forwarded to them. But there is no rule that requires the forwarding of documents of this type to an intervenor. The documents were deposited in the Public Document Room, as required; and they were available to intervenors and anyone else. Indeed, intervenors assert that they became aware of the information in this manner. In sum, the failure to send the documents to intervenors invaded none of their substantial rights.

The exception is therefore denied.¹¹²

2. Saginaw Intervenors' exception II. G. asserts that because of "amendments" to the staff's evaluation, the ACRS review was not in accordance with Section 182.b of the Atomic Energy Act.¹¹³ As an illustration of such an "amendment," they point to the approval by the staff of the Interim Acceptance Criteria for the emergency core cooling for Babcock & Wilcox reactors, including Midland.

We do not agree with this analysis. The ACRS reviewed this reactor and reported twice to the Commission before the radiological phase of the hearing.¹¹⁴ The ACRS also reviewed the Interim ECCS Criteria which were adopted by the Commission in June 1971. When the criteria were first approved, they did not include models for the Babcock & Wilcox or Combustion Engineering reactors. Following the staff's approval of models for these two vendors in December 1971, the ACRS reviewed the new criteria incorporating these models and approved them for use.¹¹⁵

The Babcock & Wilcox model to which the Midland reactors must conform is detailed in Part 4 of the Interim Criteria. It is obvious that, having reviewed the application for the Midland reactors previously, and having approved the Interim Criteria for the ECCS of Babcock and Wilcox reactors, there was no need for further ACRS review of the Midland reactors.

3. The question of the need for further ACRS review is also raised by the Saginaw Intervenors' Motion of March 28, 1973, to incorporate into the record on appeal an exchange of correspondence between the ACRS and the Commission relating to ACRS "generic items." By letter of December 18, 1972, the ACRS transmitted a list of generic concerns which it had identified in earlier letters on individual facilities. The December 18 letter listed 25 of the items as being resolved, with the other 22 items remaining unresolved. In its response of February 5, 1973, the Commission manifested its intent to continue to conduct research in order to resolve the other items on a generic basis. It is to be noted that, in its December 18 letter, the ACRS makes it clear that resolution of an item "indicates that the Committee is satisfied in a generic sense;" and that, for unresolved items, the ACRS "will continue to consider [these] items and their significance to safety on a case-by-case basis until generic resolution is reached."

The Saginaw Intervenors focus on the unresolved generic items and assert, in effect, that they must be resolved prior to issuance of any further construction permits. The intervenors, of course, had every reason to be aware of the unresolved items applicable to the Midland reactors prior to the close of hearings here, since they had been reflected in the ACRS letters. That some of them remain unresolved (in the sense of the ACRS letter of December 18, 1972) is not new information which would justify reopening of this record. The only new information is that 25 of these generic items *have* been resolved.

Additionally, the lack of resolution of certain items on a generic basis does not mean that, as applied to the Midland reactors, the particular items have not been satisfactorily dealt with. Such applicable items have been considered in the review of these reactors by the regulatory staff, the ACRS, and the Licensing Board. Accordingly, the exchange of correspondence in question raises no question as to the validity of any of the Licensing Board's findings.

4. Mapleton Intervenors' exception 3 focuses on the Licensing Board's finding that site meteorology data were incomplete,¹¹⁶ claiming that construction permits may not issue prior to the completion of the meteorological data and analysis. AEC regulations provide otherwise, and permit certain information to be developed during plant construction.¹¹⁷ When further meteorological data are required, the AEC makes

¹¹² Our discussion in Part III, *supra*, adequately disposes of the intervenors' assertion concerning the Licensing Board's obligation independently to investigate matters such as these.

¹¹³ 42 U.S.C. 2232(b).

¹¹⁴ Letters from ACRS to the Chairman of the Commission, dated June 18, 1970 and September 23, 1970.

¹¹⁵ Letter from ACRS to Chairman of the Commission, dated January 7, 1972.

¹¹⁶ Initial Decision, par. 23.

¹¹⁷ 10 CFR § 50.35(a)(2) and (4).

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Excerpts from 199th ACRS Meeting

Nov. 11-13, 1976

Minutes of 199th ACRS Meeting

Meeting Dates: November 11-13, 1976

L. ACRS Reports and Letters

1. Supplemental Report on Midland Plant, Units 1 and 2

In response to a request from Chairman D. M. Head of the Midland Atomic Safety and Licensing Board, the Committee prepared a supplemental report on the Midland Plant, Units 1 and 2, identifying the generic items applicable to the Midland Plant which had been previously "identified by the Regulatory Staff and the ACRS" (see Appendix XLVI).

Midland Plant

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