

Regulatory Docket File



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Company

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March 29, 1976

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



MIDLAND PROJECT
HIGH ENERGY LINE BREAK
ANALYSIS CRITERIA
FILE: B3.6 SERIAL: 2247

Performance of the Midland High Energy Line Break Analysis (HELBA), since the submittal of PSAR Amendment 25, has raised many questions on interpretation of NRC criteria for the analysis. We feel that these questions can best be addressed by a meeting with the appropriate NRC staff personnel. A proposed agenda outlining the topics of discussion has been attached for your consideration.

Due to the impact upon the Midland High Energy Line Break Analysis, we would appreciate an opportunity to meet with your staff as soon as possible.

R. C. Bauman
Project Engineer

RCB/fw

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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.G. 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 MEB 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 MEB 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 13, 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.

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TO: R.S. Boyd

FROM: Consumers Power Co.
Jackson, Michigan
R.C. Bauman

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W/Attached Meeting Agenda.....

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PLANT NAME: Midland # 1 & 2

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