

## Docket Nos. 50-329/330

## ATOMIC ENERGY COMMISSION WASHINGTON, D.C. 20545

JAN 1 8 1973

Consumers Power Company ATTN: S. H. Howell Vice President 212 West Michigan Avenue Jackson, Michigan 49201

## Gentlemen:

The enclosed Errata Sheet for "General Information Required for Consideration of the Effects of a Piping System Break Outside Containment" amends our letter to you of December 15, 1972. This letter concerned the potential effects of steam line breaks in the Midland Plant, Units 1 and 2, respectively.

Please contact us if you desire discussion or clarification of this material.

Sincerely,

A. Schwencer, Chief

Pressurized Water Reactors

Branch No. 4

Directorate of Licensing

Enclosure: Errata Sheet

cc: Harold R. Reis
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## ERRATA SHEET FOR "GENERAL INFORMATION REQUIRED FOR CONSIDERATION OF THE EFFECTS OF A PIPING SYSTEM BREAK OUTSIDE CONTAINMENT"

The following lists the changes that have evolved on our initial information request:

 Page 2, Item 2--Insert the following in 2. to precede the existing first sentence:

"Design basis break locations should be selected in accordance with the following pipe whip protection criteria; however, where pipes carrying high energy fluid are routed in the vicinity of structures and systems necessary for safe shutdown of the nuclear plant, supplemental protection of those structures and systems shall be provided to cope with the environmental effects (including the effects of jet impingement) of a single postulated open crack at the most adverse location(s) with regard to those essential structures and systems, the length of the crack being chosen not to exceed the critical crack size. The critical crack size is taken to be 1/2 the pipe diameter in length and 1/2 the wall thickness in width."

- Page 2, Item 2(a)(2)—Change nomenclature to read "any intermediate locations between terminal ends where the primary plus secondary stress intensities Sn..."
- 3. Fage 4, Item 2.(b)(2)--Change 0.9 ( $S_h + S_A$ ) to 0.8 ( $S_h + S_A$ ).
- 4. Page 6, Item 7 -- Add "structural" to read "The structural design loads..."
- 5. Page 7, Item 11.(a) -- Add "required" so as to read, "Loss of required redundancy..."
- 6. Page 7, Item 11.(a) -- Delete "the steam line break" and replace with "that" to read "...the consequences of that accident..."
- 7. Page 8, Item 11.(b) -- Replace (b) with the following: (b) "Environmentally induced failures caused by a leak or rupture of the pipe which would not of itself result in protective action but does disable protection functions. In this regard, a loss of redundancy is permitted but a loss of function is not permitted. For such situations plant shutdown is required."

8. Page 8, Item 13--Change wording in the first sentence to read "Environmental qualification should be demonstrated by test for that electrical equipment required to function in the sceam-air environment resulting from a high energy fluid line break."