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Docket Nos. 50-247 ✓  
 and ~~50-282~~  
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1/24/73

Consolidated Edison Company  
 of New York, Inc.  
 ATTN: Mr. William J. Cahill, Jr.  
 Vice President  
 4 Irving Place  
 New York, New York 10002

Gentlemen:

Our letter to you dated December 19, 1972, regarding the safety implications of postulated failure of high energy piping systems outside of the containment, transmitted a guide entitled "General Information Required for Consideration of the Effects of a Piping System Break Outside Containment."

As a result of further consideration and review by the staff certain changes to this guide have been made and errors have been corrected. These changes and corrections are shown in the enclosed errata sheet.

Please factor these changes into your current study of the problem.

Sincerely,

/s/

Karl Kniel, Chief  
 Pressurized Water Reactors  
 Branch No. 2  
 Directorate of Licensing

Enclosure:  
 Errata Sheet

ccs:  
 Listed on page 2

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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:

1. 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."
2. Page 2, Item 2(a)(2)--Change nomenclature to read "any intermediate locations between terminal ends where the primary plus secondary stress intensities  $S_n$  ..."
3. Page 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 steam-air  
environment resulting from a high energy fluid line break."