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Docket No. 50-313

JAN 22 1973

Mr. J. D. Phillips  
 Vice President & Chief Engineer  
 Arkansas Power & Light Company  
 Sixth and Pine Streets  
 Pine Bluff, Arkansas 71601

Dear Mr. Phillips:

On December 14, 1972 Mr. A. Giambusso transmitted to you a request for analyses and information related to the rupture of high energy lines outside containment. An enclosure to that letter defined the general information required. We have since identified a number of clarifications and corrections to that enclosure and enclose them herewith. Your staff has already been informed of these items by telephone.

Sincerely,

Original Signed by  
 Albert Schwencer

A. Schwencer, Chief  
 Pressurized Water Reactors Branch No. 4  
 Directorate of Licensing

Enclosure:  
 Errata Sheet

cc w/encl:  
 Horace Jewell, Esquire  
 House, Holms & Jewell  
 1550 Tower Building  
 Little Rock, Arkansas 72201

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LB

OFFICE ▶	: PWR-4	PWR-4				
SURNAME ▶	<i>RMB</i> RMBernero:emp	<i>AS</i> ASchwencer				
DATE ▶	1/22/73	1/23/73				

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."