

● Docket

Docket No. 50-305

DEC 15 1972

Mr. E. W. James  
Senior Vice President  
Wisconsin Public Service Corporation  
P. O. Box 1200  
Green Bay, Wisconsin 54305

Dear Mr. James:

The Regulatory staff's continuing review of reactor power plant safety indicates that the consequences of postulated pipe failures outside of the containment structure, including the rupture of a main steam or feedwater line, need to be adequately documented and analyzed by licensees and applicants, and evaluated by the staff as soon as possible. Criterion No. 4 of the Commission's General Design Criteria, listed in Appendix A of 10 CFR Part 50 requires that:

"Structures, systems, and components important to safety shall be designed to accommodate the effects of and to be compatible with the environmental conditions associated with normal operation, maintenance, testing and postulated accidents, including loss-of-coolant accidents. These structures, systems, and components shall be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit."

The previous version of the Commission's General Design Criteria also reflect the above requirements.

Thus, a nuclear plant should be designed so that the reactor can be shut down and maintained in a safe shutdown condition in the event of a postulated rupture, outside containment, of a pipe containing a high-energy fluid, including the double-ended rupture of the largest pipe in the main steam and feedwater systems. Plant structures, systems, and components important to safety should be designed and located in the facility to accommodate the effects of such a postulated pipe failure to the extent necessary to assure that a safe shutdown condition of the reactor can be accomplished and maintained.

OFFICE ▶						
SURNAME ▶						
DATE ▶						

Mr. E. W. James

-2-

Based upon the information you furnished in the Preliminary Response transmitted with your November 7, 1972 letter and upon our discussions with you during the meeting on November 16, 1972, we understand that the Kewaunee Nuclear Power Plant does not meet these criteria. From this it appears that some modifications to the facility will be necessary.

We request that you provide us with analyses and other relevant information needed to determine the consequences of such an event, using the guidance provided in the enclosed general information request. The enclosure represents our basic information requirements for plants now being constructed or operating. You should determine the applicability, for the Kewaunee facility, of the items listed in the enclosure.

If the results of your analyses indicate that changes in the design of structures, systems, or components are necessary to assure safe reactor shutdown in the event this postulated accident situation should occur, please provide information on your plans to revise the design of your facility to accommodate the postulated failures described above. Any design modifications proposed should include appropriate consideration of the guidelines and requests for information in the enclosure.

We will also need, as soon as possible, estimates of the schedule for design, fabrication, and installation of any modifications found to be necessary. Please inform us within 7 days after receipt of this letter when we may expect to receive an amendment with your analysis of this postulated accident situation for the Kewaunee facility, a description of any proposed modifications, and the schedule estimates described above. Sixty copies of the amendment should be provided.

A copy of the Commission's press announcement on this matter is also enclosed for your information.

Sincerely,

Original signed by:  
Roger S. Boyd

A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Enclosure:  
As stated

cc: See Next Page

OFFICE ►

SURNAME ►

DATE ►

Mr. E. W. James

-3-

cc: Richard C. Straub  
Manager, Nuclear Development  
Wisconsin Public Service Corporation  
P. O. Box 1200  
Green Bay, Wisconsin 54305

Steven E. Keane, Esquire  
Foley, Sammand, and Lardner  
735 North Water Street  
Milwaukee, Wisconsin

Gerald Charnoff  
Shaw, Pittman, Potts, Trowbridge & Madden  
910 - 17th Street, N.W.  
Washington, D. C. 20006

David O. Comey  
Businessmen For The Public  
Interest  
109 North Dearborn Street  
Suite 1001  
Chicago, Illinois 60602

DISTRIBUTION:

AEC PDR  
Local PDR  
Docket File (50-305)  
RP Reading  
PWR-2 File  
S. Hanauer  
R. S. Boyd  
R. C. DeYoung  
D. Skovholt  
F. Schroeder  
R. R. Maccary  
D. Knuth  
R. Tedesco  
H. Denton  
PWR Branch Chiefs  
R. W. Klecker  
OGC  
Reg. Ops. (3)  
L. Crocker  
M. Service

OFFICE ▶	L:PWR-2	L:PWR-2	L:AD/PWRs	L:AD/PWRs	L:DDIR:RP	
SURNAME ▶	LCrocker:eag Ext. 7701	KKniel	RCDeYoung	RBoyd	AGAmbusso	
DATE ▶	12/15/72	12/15/72	12/15/72	12/15/72	12/15/72	