DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

April 9, 1982

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: McGuire Nuclear Station, Unit 1
Docket No. 50-369
PWR Main Steam Line Break With Continued Feedwater Addition

Dear Mr. Denton:

Mr. R. L. Tedesco's (NRC/NRR) letter of January 21, 1982 indicated that the Franklin Research Center is performing a generic review of PWR main steam line break with continued feedwater addition, and requested additional information relating to McGuire Unit 1 be provided by February 19, 1982. The request for information was subsequently modified by Ms. E. G. Adensam's (NRC/NRR) letter of March 4, 1982, and various telecon's between your staff and Duke Power Company.

Please find attached Duke Power Company's response to the information request as revised in E. G. Adensam's letter. Due to the revisions of the request, a response date later than February 19, 1982 is justified. Should you have any questions concerning the information, please advise.

Very truly yours,

William O. Parker, Jr.

PBN/jfw
Attachment

cc: Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Mr. P. R. Bemis
Senior Resident Inspector
McGuire Nuclear Station

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Duke Power Company
McGuire Nuclear Station
Response to Franklin Research Center's
Request for Additional Information

Request No. 1: Provide the time after the start of a MSLB that containment design pressure will be exceeded if no operator action is taken to terminate the accident. Provide the magnitude of the peak pressure and the time at which the peak occurs.

NOTE: A statement that operator action performed within 10 minutes of the start of an accident because this is the licensing basis for the plant will not be considered responsive to this request for justification.

Response: Results from the design basis main steam line break postulated indicate that 0.88 million lbs. of ice are available 10 minutes after the break. Assuming the single failure which results in maximum auxiliary feedwater flow to the faulted steam generator, containment design pressure will not be exceeded in less than 30 minutes since 0.88 million lbs. of ice is estimated to last an additional 20 minutes (beyond the initial 10 minutes) without isolating auxiliary feedwater flow.

Request No. 2: Justify your assumption of operator action in 10 minutes. Provide the actions to be taken by the operator to identify the steam generator and isolate the AFW flow to that generator.

Response: The operator will identify steam line break locations primarily by using the control room steam generator pressure indication. One steam generator pressure indication lower than the other loops indicates the location. After identifying the faulted steam generator steam line, auxiliary feedwater is isolated by closing the motor operated isolation valves from the control room to that loop. The operator can complete all of these actions in less than 10 minutes.