

Regulatory Docket File

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28201

A. C. THIES
SENIOR VICE PRESIDENT
PRODUCTION AND TRANSMISSION

P. O. Box 2178

December 19, 1973

Mr. Angelo Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
Office of Regulations
U. S. Atomic Energy Commission
Washington, D. C. 20545

Re: Oconee Nuclear Station
Unit 1
Docket No. 50-269

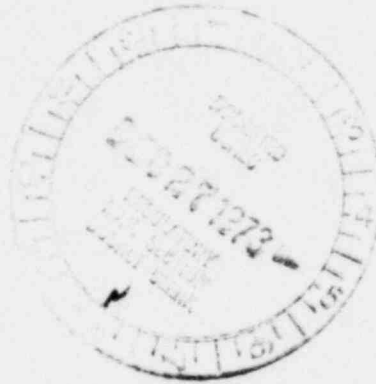
Dear Mr. Giambusso:

In my letter of October 5, 1973, we committed that the pressurizer electromatic relief block valve, RC-4, would be closed except for transients until approval of the wall thickness analyses for the electromatic relief valve RC-66 is obtained from Regulatory Operations.

On December 17, 1973, Oconee Unit 1 was in a transient mode being started up from a shutdown condition. RC-4 was opened. During the startup phase, the pressurizer spray valve RC-1 failed in the closed position. It was also determined that RC-4 had stuck in the open position. This was reported to Region II, Regulatory Operations on the morning of December 17. The operating situation was reviewed by the station supervisory staff and by the Charlotte General Office; it was concluded that continued operation presented no safety problems and met the requirements of the technical specifications. Concurrently, B&W was requested to review the continued operation of the plant while power was being held at 60% until their review could be completed.

On December 18, 1973, Mr. Al Schwencer of your staff directed us to provide you with an evaluation of continued operation with the pressurizer spray valve inoperable. B&W and Duke have reviewed this mode of operation and find that it is acceptable. The safety analyses presented in the Final Safety Analysis Report does not take credit for the pressurizer spray system or for the electromatic relief valve. Plant experience has shown that a 20% runback or load swing can be achieved without pressurizer spray valve action and without reactor trip.

On December 18, 1973, by overriding the thermal overloads, the block valve RC-4 was closed and will remain closed until the spray valve is repaired. However, assuming



Mr. Angelo Giambusso

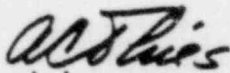
Page 2

December 19, 1973

the failure of the pressurizer electromatic relief valve while the block valve was in the open position, a transient equivalent to a very small leak would result. A reactor trip would also occur but no cladding heatup would be expected. If steam flow is maintained through the valve, normal makeup system is capable of matching the leak flow before the high pressure system is actuated at 1600 psig. It is more likely to expect a two phase mixture to exit the reactor coolant system through the valve. This would cause the actuation of the high pressure injection which would deliver sufficient flow to match the leak rate. In either case, an adequate inventory of fluid would be maintained within the reactor vessel to preclude any clad heatup.

Any significant pressure transients would be terminated by the Reactor Protective System and the pressurizer relief valves. Although the failure of the pressurizer spray valve presents some operational difficulties, this valve failure does not affect the safe operation of the plant and does not pose any hazard to the health and safety of the public .

Yours very truly,



A. C. Thies

ACT/jg

cc: Mr. Norman C. Moseley