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POWER BUILDING
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Regulatory File Cy.

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A. C. THIES
SENIOR VICE PRESIDENT
PRODUCTION AND TRANSMISSION

February 5, 1973

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

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

Dear Mr. Giambusso:

Please refer to my letter of January 26, 1973. In that letter, you were informed that as a result of our continuing analysis on the postulated failure of lines containing high energy fluids we would propose appropriate modifications to meet the interpretation of Criterion IV of the Commission's general design criteria. We also informed you that we would implement interim measures which could reduce the consequence of postulated high energy line ruptures, reduce the probability of occurrence, or assure that equipment needed to mitigate the accident is available.

On January 18, 1973, we met with members of your staff to present the results of our analysis to date and advised them that Oconee Unit 1 could be shut down safely in the event that a hypothetical accident identified by your criteria did occur. In that accident analysis, we identified two instances where the single failure criteria may not have been met. Consequently, interim measures will be taken until the analysis is complete or design modifications can be implemented.

For postulated feedwater line break in the turbine building, we will take the following measures:

1. Drill openings in the piping insulation near high stress locations on feedwater piping identified to you in our discussions on January 18. These areas will be visually observed once per shift to detect any leak.

2. The auxiliary service water pump will be tested for a minimum time of one hour each week to assure operability.

3. A redundant cable will be pulled from the 4160 auxiliary service water switchgear to the high pressure injection pumps. This cable will be available for quick manual connection to any of the high pressure injection pumps should it be needed.

For the feedwater break in the penetration room, the following measures will be taken:

1. The reactor building isolation valve in the high pressure injection line B (HP 27) will be left open to reduce the probability of a single failure occurrence.

2. Insulation on the feedwater lines in the penetration room will be drilled near the terminal ends and visually observed once per shift to detect any leakage.

3. An additional temperature detector will be installed in the penetration room to give the operator information as to the occurrence and location of a break.

The above-mentioned temperature detector will be installed prior to March 15, 1973. In addition to the above measures, emergency procedures are being developed for the following situations: Loss of feedwater to the steam generators with the emergency feedwater system operable and loss of feedwater to the steam generators with the emergency feedwater system inoperable. Also, the emergency procedure covering steam line break will be revised as required to include information resulting from our analysis.

We are also developing procedures for a surveillance program to inspect the areas of postulated ruptures. Procedures for making visual examinations of the metal surfaces of the higher stress locations are also being developed. More information on this program will be forwarded to you within 10 days following initial criticality.

Very truly yours,

A. C. Thies

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