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Docket Nos. 50-269/270/287

Mr. William O. Parker, Jr.  
Vice President - Steam Production  
Duke Power Company  
P. O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

Dear Mr. Parker:

In order to complete our review of the Standby Shutdown Facility at the Oconee Nuclear Station we find that we need additional information. These requests relate to seismic design.

Kindly respond with three signed originals and 37 additional copies on a schedule consistent with the completion schedule of the facility.

Sincerely,

Original signed by

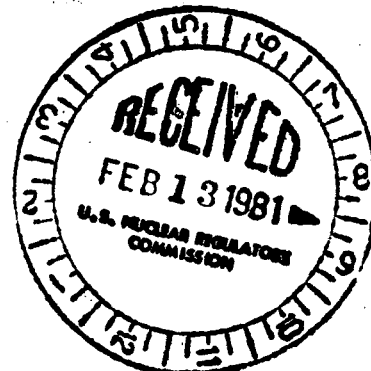
Robert W. Reid

Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

Enclosure:

Request for Additional  
Information

cc w/enclosure:  
See next page



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| OFFICE  | ORB#4:DL    | C-ORB#4:DL |  |  |  |  |  |
| SURNAME | MFairtile;c | R Reid     |  |  |  |  |  |
| DATE    | 2/9/81      | 2/9/81     |  |  |  |  |  |



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

Doc Ket

50-269

February 9, 1981

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Vice President - Steam Production  
Duke Power Company  
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Sincerely,

A handwritten signature in dark ink, appearing to read "Robert W. Reid", is written over the typed name.

Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing

Enclosure:  
Request for Additional  
Information

cc w/enclosure:  
See next page

Duke Power Company

cc w/enclosure(s):

Mr. William L. Porter  
Duke Power Company  
P. O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

Office of Intergovernmental Relations  
116 West Jones Street  
Raleigh, North Carolina 27603

Oconee County Library  
501 West Southbroad Street  
Walhalla, South Carolina 29691

Honorable James M. Phinney  
County Supervisor of Oconee County  
Walhalla, South Carolina 29621

Director, Criteria and Standards  
Division  
Office of Radiation Programs (ANR-460)  
U. S. Environmental Protection Agency  
Washington, D. C. 20460

U. S. Environmental Protection Agency  
Region IV Office  
ATTN: EIS COORDINATOR  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

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U.S. Nuclear Regulatory Commission  
Route 2, Box 610  
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DeBevoise & Liberman  
1200 17th Street, N.W.  
Washington, D. C. 20036

ENCLOSURE

REQUEST FOR INFORMATION

1. Provide the mathematical model that is used in your earthquake response analysis of SSF. The model should show mass points, their coordinates, damping and spring arrangements and their corresponding numerical values as well as appropriate configuration of soil and bedrock foundation. In particular, provide a reasonable discussion as to how the embedded portion of the building below the ground level is modeled and how soil-structure interaction is considered. If no such soil-structure interaction is considered, please justify the proposed design by discussing why the model without soil-structure interaction represents a conservative dynamic model.
2. Discuss where the 0.10g bedrock acceleration is applied. Indicate the location of application in the model requested in Question 1 above.
3. Provide the reference from which the proposed load combinations of SSF are obtained. Discuss and justify any deviations from the SRP either in the actual combination formulas or the definition of the terms.
4. Describe any safety grade structures such as cable tunnels or buried piping systems that connect SSF with other facilities (e.g. reactor building). Discuss design limits and associated safety analysis for such structures.
5. It is not clear whether your submittal was written before or after the completion of the SSF design. Indicate if the proposed design criteria

contained in the present report have been met in the final design. Should there be any deviations from it, identify and discuss such deviations.

Indicate also if the design has met all the pertinent regulations and therefore public safety is assured.