

JUN 1 1983

Docket Nos: 50-390
and 50-391

Mr. H. G. Parris
Manager of Power
Tennessee Valley Authority
500A Chestnut Street, Tower II
Chattanooga, Tennessee 37401

DISTRIBUTION:
Docket Nos. 50-390/391
NRC PDR
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ACRS (16)

Dear Mr. Parris:

Subject: Request for Additional Information Regarding
the Geotechnical Concerns at the Watts Bar
Nuclear Plant, Units 1 and 2

Enclosure (1) lists requests for additional information that have resulted from the review of your November 30, 1982 and March 25, 1983, submittals regarding the analysis of sheetpile walls and seismic analysis of buried pipes at the Watts Bar Nuclear Plant, Units 1 and 2. These were discussed during an April 12, 1983, telecon with your staff.

We request that you respond to these questions by June 30, 1983, in order to expedite the review of your facility. If you have any questions regarding this matter, please call the project manager, T. J. Kenyon, at (301) 492-7266.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Elinor G. Adensam
Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Enclosure:
As stated

cc: See next page

8306140287 830601
PDR ADOCK 05000390
A PDR

OFFICE	DL:AD:GAN	LA:DL:LB #4	DL:LB #4				
SURNAME	TKenyon/hmc	MDuncan	EAdensam				
DATE	4/27/83	5/27/83	4/27/83				

WATTS BAR

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Mr. Donald L. Williams, Jr.
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Resident Inspector/Watts Bar NPS
c/o U.S. Nuclear Regulatory
Commission
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Chattanooga, Tennessee 37401

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

Enclosure (1)

Requests for Additional Information
Watts Bar Nuclear Plant
Units 1 and 2

Analysis of Sheetpile Walls
(See November 30, 1982 submittal)

- 1) Identify the load cases and load combinations for which passive pressures with submerged conditions were used in the analysis;
- 2) Provide and justify the soil properties and other analysis parameters used in the additional investigations;
- 3) What are the factors of safety resulting from the analysis?
- 4) Provide a discussion with sketches illustrating the technique being used to correct the locations of the weep holes. How will you ensure the continued function of the weep holes in the future?

Seismic Analysis of Buried Pipes
(See March 25, 1983 submittal)

- 1) What is the basis for the values of soil properties used in the calculations?
- 2) The submittal states that the soil would have localized failure before it could resist the magnitude of the calculated pressure. Define and justify the approach used to solve this concern and identify the specific locations and mechanisms of the failure zones.
- 3) Provide the input seismic data used in the analysis and the corresponding soil strains.
- 4) What are the intensification factors used in the analysis?
- 5) Provide the details of an analysis which demonstrates that failure of the small diameter pipes will not occur under seismic loadings. Include assumptions, failure criteria, calculation procedures and results.

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....