

Docket No. 50-269

March 27, 1987

Mr. Hal B. Tucker
Vice President - Nuclear Production
Duke Power Company
P.O. Box 33189
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Projected Values of Material Properties for Fracture Toughness
Requirements for Protection Against Pressurized Thermal Shock Events

We have reviewed your letter dated January 23, 1986 which was submitted in response to the Pressurized Thermal Shock (PTS) Rule, 10 CFR 50.61, for the Oconee Nuclear Station, Unit 1. We have found the material properties of reactor vessel beltline materials, the projected fluence at the inner surface of the reactor vessel at the expiration date of the license and the calculated RT_{PTS} at the expiration date of the license, November 6, 2007, to be acceptable. The calculated RT_{PTS} is below the screening criterion of 300°F for longitudinal weld material at the expiration date of the license. This meets the requirements of the PTS Rule.

On January 14, 1986 with later supplements, you applied for an amendment to extend your license for Oconee Unit 1, and you have provided information to support operation of your plant to the proposed expiration date of the license without exceeding the PTS screening criteria. In our January 30, 1987 amendment approving the extension, we addressed in the evaluation your request to extend the expiration date of your license. We found that for Oconee Unit 1 the staff estimated that for 40 calendar years of operation, the RT_{PTS} will not exceed the PTS screening criterion.

The PTS Rule requires that the projected assessment of the RT_{PTS} must be updated whenever changes in core loadings, surveillance measurements or other information (including changes in capacity factor) indicate a significant change in the projected values. This ensures that the licensees will track the fluence at the limiting beltline materials throughout the life of the plant to verify their assumptions. In this regard, we request you to submit a reevaluation of the RT_{PTS} and comparison of the predicted value with future Pressure-Temperature submittals which are required by 10 CFR 50, Appendix G. This request is covered under OMB clearance No. 3150-0011.

Our associated Safety Evaluation is enclosed.

Sincerely,

/s/

John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

8704090089 870327
PDR: ADOCK 05000269
P PDR

Enclosure

Office: PM/PBD6
Concurrees: HPastis/jm
Date: 2/5/87

[Signature]
LPM/PBD6
GVissing
3/28/87

[Signature]
BPD/PBD6
GEdison
3/27/87

[Signature]
BC/PBEB
TMarsh
3/21/87

[Signature]
PD/PBD6
JStolz
3/27/87

Mr. H. B. Tucker
Duke Power Company

Oconee Nuclear Station
Units Nos. 1, 2 and 3

cc:

Mr. A. V. Carr, Esq.
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

Duke Power Company
Post Office Box 33189
422 South Church Street
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esq.
Bishop, Liberman, Cook, Purcell & Reynolds
1200 Seventeenth Street, N.W.
Washington, D.C. 20036

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220, 7910 Woodmont Avenue
Bethesda, Maryland 20814

Manager, LIS
NUS Corporation
2536 Countryside Boulevard
Clearwater, Florida 33515

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Route 2, Box 610
Seneca, South Carolina 29678

Regional Administrator
U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Suite 3100
Atlanta, Georgia 30303

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

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

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