



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

Docket No.: 50-213

October 2, 1987

Mr. Edward J. Mroczka, Senior Vice President  
Nuclear Engineering and Operations  
Connecticut Yankee Atomic Power Company  
Post Office Box 270  
Hartford, Connecticut 06141-0270

Dear Mr. Mroczka:

SUBJECT: PROTECTION AGAINST PRESSURIZED THERMAL SHOCK EVENTS 10 CFR 50.61  
(TAC NO. 59957)

RE: Haddam Neck Plant

By letters dated January 23, 1986, April 1, 1987, and August 21, 1987, Connecticut Yankee Atomic Power Company, the licensee for the Haddam Neck Plant, submitted information on the material properties and fast neutron fluence of the reactor pressure vessel in compliance with the requirements of 10 CFR 50.61.

The staff has reviewed the material submitted with special emphasis on the material properties and chemical composition of the beltline region of the reactor pressure vessel as well as the fast neutron fluence on the inside surface of the vessel. The staff has completed its review and concluded that the Haddam Neck Plant meets the toughness requirements of 10 CFR 50.61 for 32 effective full power years of operation. A copy of our related Safety Evaluation is enclosed. This approval is based on the existence of margin between the projected value of the peak fast neutron fluence on the inside surface of the pressure vessel and that required to reach the 10 CFR 50.61 screening criteria. As described in the Safety Evaluation, the staff was unable to completely quantify the uncertainty in the submitted Haddam Neck Plant evaluation and, therefore, CYAPCO has committed to upgrade the RTpts evaluation prior to Cycle 17 operation. This commitment is contained in the CYAPCO letter dated August 21, 1987. Guidance and acceptance criteria for fluence estimates will be included in a forthcoming Regulatory Guide.

In addition, we request that the licensee submit periodic future reevaluations of the RTpts and the corresponding comparison with the predictions contained in the CYAPCO letter dated January 23, 1986. Such submittals could be made at

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PDR ADOCK 05000213  
P PDR

October 2, 1987

the same time as the revisions to the Pressure-Temperature operating limits which are required by 10 CFR 50 Appendix G.

Sincerely,

original signed by

Francis M. Akstulewicz, Jr., Project Manager  
Integrated Safety Assessment  
Project Directorate  
Division of Reactor Projects III/IV/V  
and Special Projects

Enclosure:

As stated

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Edward J. Mroczka

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Mr. Edward J. Mrocza  
Connecticut Yankee Atomic Power Company

Haddam Neck Plant

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