IN RESPONSE, PLEASE
REFER TO: M910711A

July 19, 1991

MEMORANDUM FOR: James M. Taylor
Executive Director for Operations

FROM: Samuel J. Chilk, Secretary /S/

SUBJECT: STAFF REQUIREMENTS - BRIEFING ON YANKEE ROWE PRESSURE VESSEL EMBRITTLEMENT ISSUES, 10;00 A.M., THURSDAY, JULY 11, 1991, COMMISSIONERS' CONFERENCE ROOM, ONE WHITE FLINT NORTH, ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE)

The Commission* was briefed by representatives of the Union of Concerned Scientists and New England Coalition on Nuclear Pollution (UCS/NECNP), the Yankee Atomic Electric Company (YAEC), and the NRC staff concerning Yankee Rowe pressure vessel embrittlement issues.

Representing the UCS/NECNP were:

- Ms. Diane Curran
- Mr. Robert Pollard

Representing the YAEC were:

- Mr. Andrew Kadak, President and CEO
- Mr. John Hazeltine, Director, Yankee Projects
- Mr. Jack Lance, Plant Support Department Manager
- Mr. Eric Bimiller, Principal Engineer
- Mr. James Chapman, Manager, Probabilistic Risk Assessment

Representing the NRC staff were:

- Mr. James Taylor
- Dr. Thomas Murley
- Mr. William Russell
- Mr. James Richardson
- Mr. Ashok Thadani

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* Commissioner Remick was not present.

The Commission advised Ms. Curran that the UCS/NECNP could file additional written comments in response to the YAEC and staff presentations.

The Commission requested the staff to provide an analysis of the uncertainties associated with the factors that make up the calculations of the probability of a PTS event (i.e. the uncertainty in the RT_{NDT} values, the upper shelf energy, the probability of various initiating events, and the conditional vessel failure probability). The staff should also indicate what factors are the most sensitive in causing large variations in the final calculated values of a PTS vessel failure.

Relative to the $5x10^{-6}$ probability value which was used as a base for the screening temperatures in 10 CFR 50.61; the Chairman requested the staff to indicate what portion of the value was attributable to the various events causing the transient and what portion was attributable to the conditional failure probability of the vessel.

Commissioner Rogers requested the licensee to submit a set of curves for the RT_{NDT} that shows the error bands of the data used to calculate the temperature values.

Commissioner Curtiss asked UCS/NECNP to comment on the assumptions used by the staff in evaluating the integrity of the reactor vessel (UCS/NECNP, as well as the licesensee, were subsequently provided with a copy of staff's memo setting forth bases for the various assumptions).

Commissioner Curtiss requested the staff to provide information on whether there are facilities other than Yankee Rowe where the Upper-Shelf Energy (USE) requirements of 10 CFR 50, Appendix G, Section IV.A.1 are not met, and whether, if such cases exist, not only has the analysis authorized under IV.1 been done by the Director of NRR but the licensee has also been required to meet V.C.1 as well.

Commissioner Curtiss requested the staff to provide for the record their position on whether the requirements of V.C. in Appendix G to 10 CFR 50 apply if the Upper Shelf Energy Values specified in IV.A.1 are not met.

The staff agreed to provide the Commission with a list of any other plants which have not but should have requested exemptions from to the requirement of 10 CFR 50, Appendix H.

Commissioner Curtiss requested the staff to provide the Commission with an evaluation of the impact of raising the temperatures of the ECCS injection water as specified by the

licensee.

The Chairman indicated that the staff would be holding a public meeting at a location near the Yankee Rowe plant on July 22 and shortly thereafter the staff would make a recommendation to the Commission which would be promptly made public. He also indicated that the Commission had agreed that it, rather than the staff, would make the final determination whether the Yankee Rowe plant is required to shut down prior to the end of cycle 21. In exercising this supervisory authority the Commission will review the Director's recommendations for a decision on the pending 2.206 petition, the information presented by the petitioners and all relevant technical information.

cc: The Chairman
Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
OGC
GPA
ACRS
PDR - Advance
DCS - P1-24