

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555 February 6, 1991

Docket No. 50-309

Mr. C. D. Frizzle, President Maine Yankee Atomic Power Company 83 Edison Drive Augusta, Maine 04336

Dear Mr. Frizzle:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - SPENT FUEL CASK HANDLING (TAC NO. 71178)

This is in response to your submittal dated November 8, 1988, in which you requested to amend Technical Specification (TS) 1.1, Fuel Storage. The proposed amendment would change item D of the above-referenced specification to allow movement of a shipping cask over irradiated fuel adjacent to the cask laydown area, provided the fuel has cooled at least 60 days.

The staff has reviewed your submittal and has prepared 9 (nine) questions. Four (4) of these questions were sent to you by telefax on March 5, 1990, to which you responded on July 17, 1990. In an attempt to unify this request for additional information, and to make future references clear, the remaining five (5) questions follow in sequence:

- 5. Since you state that standard fuel assemblies are intended to be stored in temporary fuel storage racks in the cask laydown area, the specification that covers such storage (TS 1.1.F) should be amended to prohibit cask movement around the cask laydown area until the area is free of fuel assemblies. In addition, TS 2 1.D, which will be changed to permit movement of the cask, should be amended to 1) include reference to the cask size or type, since cask size or type enters into the calculation of spent fuel assemblies damaged in a postulated drop, and 2) permit cask movement only into the cask laydown area. A specific bounding cask drop analysis, in which the cask is dropped directly into the spent fuel pool (SFP), with acceptable results, would be required to permit cask travel over the SFP.
- 6. Describe the operator training and new (or revised) procedures intended to address operation with a cask near the SFP. Although you cite a safety evaluation dated December 30, 1983 that found activities in this area satisfactory, it is not clear that the use of a cask was covered or contemplated at the time of that review.
- 7. TS 1.1.G addresses the possibility of as many as 20 consolidated fuel assemblies being stored in the SFP. What consideration was given to such storage in the calculations involving a cask drop and its effect on offsite doses, criticality and damage to the SFP?

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Mr. C. D. Frizzle

- 8. Have you confirmed that the cask will not be carried over the SFP, and are changes to the TS necessary to preclude such an event?
- 9. Please confirm that if ever you intend to move a spent fuel cask over the spent fuel pool, all calculations involving a cask drop will include the consequences of the full length of the cask falling onto spent fuel. Further, such an analysis must bound any future cask handling operations, or the analysis and calculations must be revised accordingly.

If you have any questions or need additional information on this matter, please do not hesitate to call me.

Sincerely,

Original signed by E. H. Trottier, Project Manager Project Directorate I-3 Division of Reactor Projects - 1/II Office of Nuclear Reactor Regulation

cc: See next page

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Mr. C. D. Frizzle

Maine Yankee

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