

THE COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF THE ATTORNEY GENERAL JOHN W. MC CORMACK STATE OFFICE BUILDING ONE ASHBURTON PLACE, BOSTON 02108

FRANCIS X. BELLOTTI ATTORNEY GENERAL

REGULATORY DOCKET EN

July 22, 1977

Mr. Edson G. Case Director of Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

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Dear Mr. Case:

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We recently learned that the shutdown of the Yankee Atomic nuclear power plant in Rowe, Massachusetts, involves substantially more than a normal refueling. In pursuing this matter, persons from this staff have spoken with Mr. Fred Burger, the Project Manager, and Messrs. EldonBrunner, Burt Davis, and Bill Lazarus at N.R.C. in King of Prussia, Pennsylvania. They indicated their intention to send this office the available written material including meeting minutes and accident analyses reports. This letter will confirm our request for that information.

It is my understanding, based on the conversations with these gentlemen, that Yankee Atomic was shut down during a "coast-down," a few weeks before a scheduled refueling. The "problem" has been described to us as an Emergency Core Cooling System condition that had not been considered in the evaluation of ECCS effectiveness. Apparently the omission was discovered during a routine re-fueling analysis.

Certain questions surrounding this incident continue to concern us. Primarily, I am interested in understanding the problem at the Rowe plant from a layperson's perspective, how it happened and what steps are being taken to correct it. I hope that you can clarify the situation for me by answering the following questions:

(1) What, precisely, is the nature of the situation which resulted in the plant shutdown? Is it a violation of, or nonconformity with, any N.R.C. regulations?

(2) Yankee Atomic was preparing for Core 13. Presumably, therefore, several pre-refueling analyses were prepared in the past. Why did this situation go undiscovered until so recently?

(3) What, precisely, is being undertaken to remedy this situation? We were told that some computer tests are being done

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and that some piping is being modified. Are the entire ECCS and other safety systems being reanalyzed in a search for other "omissions?" Are other design or equipment modifications necessary?

(4) Mr. Burger explained that Yankee Atomic shut down because it was the prudent thing to do but that it could have operated, at least until refueling, at a lower power level. Yankee Atomic was at 68% capacity when it shut down. At what level could it have safely operated, staying within NRC regulation specifications for heat rate?

(5) Will the plant be able to operate at its licensed power level after this problem is resolved, or will a license amendment be forthcoming?

(6) What is the relationship between the computer analysis and the piping modifications, both of which are apparently being undertaken now? Is the computer analysis intended to test the effectiveness of the ECCS as modified? If so, how can it be performed prior to completion of the changes in the ECCS?

I thank you in advance for your attention to this matter.

Very truly yours,

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ELLYN R. WEISS Assistant Attorney General Environmental Protection Division One Ashburton Place, 19th Floor Eoston, Massachusetts 02108 (617) 727-2265

ERW: JK

cc. Mr. Fred Burger Project Manager

> Thomas Merrigan, Esq. Greenfield, Mass.

Mr. Eldon Brunner U.S. N.R.C. King of Prussia, Pa.

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