PSNH PUBLIC SERVICE
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United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. George W. Knighton, Chief
Licensing Branch 3
Division of Licensing

References: (a) Construction Permits CPPR-135 and CPPR-136, Docket Nos. 50-443 and 50-444
(b) USNRC Memorandum, dated October 14, 1982, "Notice of Meeting Regarding Open Items in the Safety Review," J. D. Kerrigan to L. L. Wheeler

Subject: Response to Reactor Systems Branch Open Item

Dear Sir:

The following Reactor Systems Branch open item was discussed at the referenced meeting:

"Based on recent main steam line break analysis from other PWR vendors, the staff is concerned that certain break sizes coupled with a loss of off-site power at the worst point in the transient may result in significantly more fuel damage and off-site consequences than the applicant has predicted. We will require the applicant to analyze the consequences of intermediate steam line breaks from full power, with the off-site power being lost at the worst time and the reactor trip recurring on the first safety grade trip. The effects of reduced neutron leakage reaching the power range detectors as a result of the colder vessel downcomer liquid should also be addressed."

Our response to this open item is as follows:

"Sensitivity studies for the main steam line break accident are presented in WCAP 9226 'Reactor Core Response to Excessive Secondary Steam Releases' (proprietary class 2). Studies addressing intermediate break sizes, initial power level, loss of off-site power, and various trips are included in this report. The results of WCAP 9226 show that the steam line break cases present in the FSAR (double ended rupture at zero power with or without off-site power) are more limiting than a smaller break occurring from full power with off-site power lost during the transient."

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY

J. DeVincentis
Project Manager

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ALL/tst