

November 18, 1982
SBN - 376
T.F. B7.1.2

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 Letter, dated March 1, 1982, "Requests for
Additional Information," F. J. Miraglia to W. C. Tallman
(c) PSNH Letter, dated April 8, 1982, "Response to 460 Series
RAIs; (Effluent Treatment Systems Branch)," J. DeVincentis
to F. J. Miraglia
(d) PSNH Letter, dated July 12, 1982, "Amendment 45 to
March 30, 1973, Application to Construct and Operate
Seabrook Station Unit 1 and Unit 2; Incorporation of
Requests for Additional Information (RAIs)," W. P. Johnson
to F. J. Miraglia

Subject: Revised Response to RAI 460.16; (SRP Section 11.2.2, Effluent
Treatment Systems Branch)

Dear Sir:

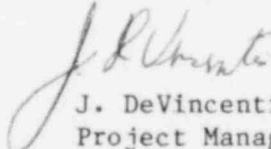
We have enclosed a revised response to the subject Request for Additional
Information (RAI) which was forwarded in Reference (b).

The original response to this RAI was submitted in Reference (c) and
subsequently incorporated into the FSAR [OL Application Amendment 45,
Reference (d)].

The enclosed response will be incorporated into OL Application
Amendment 48.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY


J. DeVincentis
Project Manager

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PDR ADOCK 05000443
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ALL/fsf

cc: Atomic Safety and Licensing Board Service List

BOO!

ASLB SERVICE LIST

Philip Ahrens, Esquire
Assistant Attorney General
Department of the Attorney
General
Augusta, ME 04333

Representative Beverly Hollingworth
Coastal Chamber of Commerce
209 Winnacunnet Road
Hampton, NH 03842

William S. Jordan, III, Esquire
Harmon & Weiss
1725 I Street, N.W.
Suite 506
Washington, DC 20006

E. Tupper Kinder, Esquire
Assistant Attorney General
Office of the Attorney General
208 State House Annex
Concord, NH 03301

Robert A. Backus, Esquire
116 Lowell Street
P.O. Box 516
Manchester, NH 03105

Edward J. McDermott, Esquire
Sanders and McDermott
Professional Association
408 Lafayette Road
Hampton, NH 03842

Jo Ann Shotwell, Esquire
Assistant Attorney General
Environmental Protection Bureau
Department of the Attorney General
One Ashburton Place, 19th Floor
Boston, MA 02108

460.16 Provide justification for taking exception to Regulatory Guide 1.143 by designing the chemical drain tank and the chemical treatment tanks to Standard PS 15-69.

RESPONSE: Table 1 of Regulatory Guide 1.143 provides equipment code requirements for radioactive waste components. Note 2 to the table states that fiberglass-reinforced plastic tanks may be used in accordance with appropriate articles of Section 10 of the ASME Boiler and Pressure Vessel Code for applications at ambient temperature. The chemical drain tank and chemical drain treatment tanks are provided for collection of decontamination and chemistry laboratory chemical wastes. The chemistry composition of the collected fluids includes acids, chloroform, sodium hypochlorite, sodium hydroxide, sulfates, acetone, alcohols, and carbon tetrachloride. The aggressive corrosive effects of these substances warrants the use of fiberglass-reinforced plastic tanks and is the reason for this material selection.

The chemical drain tank and chemical drain treatment tanks are not under the jurisdiction of Section 10 of the ASME Boiler and Pressure Vessel Code because the normal operating pressure is atmospheric and does not exceed 15 psig (see Article G-121 of ASME Section 10). However, the tanks are designed, fabricated and tested in accordance with Product Standard PS 15-69, developed cooperatively with the industry and published by the National Bureau of Standards under the Voluntary Product Standard Procedures of the U.S. Department of Commerce. (This standard was effective until withdrawn on January 20, 1982.) It includes requirements for material, mechanical properties, minimum wall thicknesses and testing. The methods used for testing of barcol hardness, flexural strength and flexural modulus conform to ASTM D2583-67 and D790-66 which are the required methods listed in article M-120 of ASME Section 10. Additionally, PS 15-69 requires conditioning for testing in accordance with ASTM D618-61, testing for glass content based on ASTM D2584-67T, and testing for tensile strength based on ASTM D638-68. The tank manufacturer performs tests on samples for compressive strength as recommended by the standard in accordance with ASTM D695-63T. The tank flanges and fittings are designed in accordance with ANSI B16.5 and ANSI B16.11.

Based on the above discussion, these tanks are considered to be appropriately designed, fabricated and tested for their application.