

April 27, 1984

SBN- 649
T.F. Q2.2.2

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Attention: Mr. Richard W. Starostecki, Director
Division of Project and Resident Programs

References: (a) Construction Permits CPPR-135 and CPPR-136, Docket
Nos. 50-443 and 50-444
(b) Telecon of March 26, 1984, A. L. Legendre (YAEC) to
A. Cerne (NRC Region I)
(c) USNRC Letter, dated December 27, 1983, "Combined Inspection
Nos. 50-443/83-17; 50-444/83-13", R. W. Starostecki to
R. J. Harrison

Subject: Interim 10CFR50.55(e) Report; Fuel Transfer Tube Seam Closure
Welds

Dear Sir:

On March 26, 1984, we reported a 10CFR50.55(e) item to Region I
[Reference (b)] regarding the potential for overstressing welds that join the
expansion joint assemblies to the fuel transfer tube. The following
information is being filed pursuant to the interim reporting provision of
10CFR50.55(e)(3).

A. Description of Deficiency

Overstressed welds on the fuel transfer tube expansion joint
assembly were discovered during the follow-up evaluation on a FSAR
deviation reported in Reference (c). The FSAR deviation concerned
the existing fillet closure welds which join the encapsulation
vessel expansion joints to the 16" diameter recirculation piping
feeding the section of the Containment Spray and Residual Heat
Removal pumps. These welds were not in accordance with ASME III
Code Class 2, requirements. The fillet welds were originally
treated as the seam closure weld for a typical mechanical or
electrical penetration assembly. However, the containment pressure
boundary extends to the expansion joint closure weld, thereby
requiring the weld joint to be an ASME III, Code Class 2, full
penetration weld per our FSAR commitment.

A review was performed to identify any other containment penetrations that also extend the containment pressure boundary and thus require weld joints to comply with ASME III, Code Class 2. The fuel transfer tube was the only additional penetration that was identified as having fillet closure welds that would be considered as part of the containment pressure boundary.

The original fillet closure welds for both the encapsulation vessels and the fuel transfer tube were analyzed to determine whether a loss of containment or fuel pool pressure boundary integrity could have occurred. The fillet welds associated with the encapsulation vessels were analyzed at the design pressure of the encapsulation vessels. The fillet welds for the fuel transfer tube were analyzed at the containment internal design pressure on the containment side and for the fuel pool fluid pressure head on the Fuel Storage Building side.

The fillet welds for the encapsulation vessels were found capable to withstand the design pressure while remaining within Code limits, however, the fillet welds for the fuel transfer tube on both the Containment and Fuel Building sides had stresses in excess of Code limits. We determined that this weld deficiency constituted a reportable 10CFR50.55(e) condition.

B. Analysis of Safety Implication

A failure of the fillet weld on the fuel transfer tube could have resulted in a loss of containment or fuel pool pressure boundary integrity.

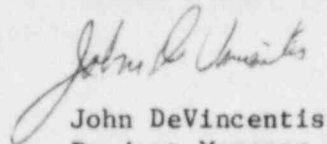
C. Corrective Action Taken

The seam closure welds for both the encapsulation tanks and the fuel transfer tube will be reworked to satisfy ASME III, Code Class 2, criteria.

The above corrective actions are scheduled to be completed by June 15, 1984. We will notify your office when the corrective action has been completed.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY


John DeVincentis
Project Manager

DJ/ds

cc: Atomic Safety and Licensing Board Service List

Director, Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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

Roy P. Lessy, Jr., Esquire
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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

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

Mr. John B. Tanzer
Designated Representative of
the Town of Hampton
5 Morningside Drive
Hampton, NH 03842

Roberta C. Pevear
Designated Representative of
the Town of Hampton Falls
Drinkwater Road
Hampton Falls, NH 03844

Mrs. Sandra Gavutis
Designated Representative of
the Town of Kensington
RFD 1
East Kingston, NH 03827

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

Senator Gordon J. Humphrey
U.S. Senate
Washington, DC 20510
(Attn: Tom Burack)

Diana P. Randall
70 Collins Street
SEabrook, NH 03874

Donald E. Chick
Town Manager
Town of Exeter
10 Front Street
Exeter, NH 03833

Brentwood Board of Selectmen
RED Dalton Road
Brentwood, New Hampshire 03833

Edward F. Meany
Designated Representative of
the Town of Rye
155 Washington Road
Rye, NH 03870

Calvin A. Canney
City Manager
City Hall
126 Daniel Street
Portsmouth, NH 03801

Dana Bisbee, Esquire
Assistant Attorney General
Office of the Attorney General
206 State House Annex
Concord, NH 03301

Anne Verge, Chairperson
Board of Selectmen
Town Hall
South Hampton, NH 03842

Patrick J. McKeon
Selectmen's Office
10 Central Road
Rye, NH 03870

Carole F. Kagan, Esq.
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Angie Machiros
Chairman of the Board of Selectmen
Town of Newbury
Newbury, MA 01950

Town Manager's Office
Town Hall - Friend Street
Amesbury, Ma. 01913

Senator Gordon J. Humphrey
1 Pillsbury Street
Concord, NH 03301
(Attn: Herb Boynton)

Richard E. Sullivan, Mayor
City Hall
Newburyport, MA 01950