

YANKEE ATOMIC ELECTRIC COMPANY

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April 19, 1985

VYM #94/85
W.O. #4100
DCC-VY-85-

Mr. A. Varella
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

*Red 4/22/85 JAV
10:00 AM*

Dear Mr. Varella:

Please find enclosed one copy of a list which provides the status of all the deadweight (including thermal or spring) supports on Seismic Class 1 lines at Vermont Yankee Nuclear Power Station. The status of these supports is the result of our Seismic Reanalysis Program, outlined to you in our presentation at Framingham on the 9th of April, 1985. A further copy of this letter and list has been sent to Mr. M. Nitzel.

If you have any questions or require any further information please do not hesitate to call.

Very truly yours,

Robert P. Oliver

R. P. Oliver
Vermont Yankee Project

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Enclosures

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PDR ADOCK 05000029
P PDR

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STATUS OF DEADWEIGHT
PIPE SUPPORTS AT
VERMONT YANKEE NUCLEAR
POWER PLANT AS A
RESULT OF A SEISMIC
REANALYSIS PROGRAM

INDEX

1. DESCRIPTION/PURPOSE OF LIST
2. CROSS REFERENCE CHART
3. STATUS OF DEADWEIGHT SUPPORTS

DESCRIPTION/PURPOSE OF LIST

1. The attached list provides the status of each deadweight pipe support for all the seismic class 1 lines reanalyzed in Vermont Yankee's Seismic Reanalysis Program (SRP) as follows:

To be removed - Deadweight support has been determined not to be required as a result of the SRP.

Attached to structural steel - These deadweight supports are attached to building steel or embedded steel plates (steel and plates are evaluated in our SRP).

Function Change - These deadweight supports have been combined with a restraint in another direction, have been redesigned as a seismic support.

Replace with standard base plate - All the hardware of this support remains acceptable - rod, clamp etc., but the base plate and bolts have been redesigned using a standard design (as shown during our audit).

Replace with custom design base plate - All the hardware of this support remains acceptable - rod, clamp, etc., but the base plate and bolts have been redesigned using a custom design (for clearance purposes a "standard" base plate design could not be used).

2. All redesigns use Hilti-Kwik bolts and a minimum factor of safety of four, and consider plate flexibility.
3. The Cross Reference Chart provides the mechanism to identify the Piping System from the Pipe Stress Problem Number.

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CROSS REFERENCE CHART

PIPE STRESS
PROBLEM NO.

PIPING SYSTEM

3	Atmospheric Control(AC) Part 5*
4	Core Spray (CS) Part 2A*
4	Core Spray (CS) Part 6A*
4	Radwaste (RW) Part 1*
5	Core Spray (CS) Part 7*
6	High Pressure Coolant Injection (HPCI) Part 7*
7	Residual Heat Removal (RHR) Part 7A
8	Core Spray (CS) Part 12*
14	Core Spray (CS) Part 8*
15	Residual Heat Removal (RHR) Part 4*
16	Core Spray (CS) Part 9*
16	Residual Heat Removal (RHR) Part 11C*
17	Core Spray (CS) Part 10*
17	Residual Heat Removal (RHR) Part 7B*
18	Core Spray (CS) Part 11*
32	Condensate Storage and Transfer (CST) Part 3*
33	Condensate Storage and Transfer (CST) Part 4*
36	Condensate Storage and Transfer (CST) Part 7*
41	Cleanup Water Demineralizer (CUW) Part 2*
50	Diesel Generator (DG) Part 1*
51	Diesel Generator (DG) Part 2*
60	High Pressure Coolant Injection (HPCI) Part 2*
61	High Pressure Coolant Injection (HPCI) Part 3*
61A	High Pressure Coolant Injection (HPCI) Part 3A*
62	High Pressure Coolant Injection (HPCI) Part 4*

PIPE STRESS PROBLEMS

25 This sheet

Cum 75th/25

PIPE STRESS
PROBLEM NO.

PIPING SYSTEM

62	Cleanup Water Demineralizer (CUW) Part 4*
62	Cleanup Water Demineralizer (CUW) Part 4A
62	Cleanup Water Demineralizer (CUW) Part 4A
62	Reactor Core Isolation Cooling (RCIC) Part 4*
63	High Pressure Coolant Injection (HPCI) Part 5*
63	Feedwater (FDW) Part 5
65	High Pressure Coolant Injection (HPCI) Part 13A
67	High Pressure Coolant Injection (HPCI) Part 9*
101	Reactor Core Isolation Cooling (RCIC) Part 2*
102	Reactor Core Isolation Cooling (RCIC) Part 3*
102	Reactor Core Isolation Cooling (RCIC) Part 3A*
105	Reactor Core Isolation Cooling (RCIC) Part 6*
105	Reactor Core Isolation Cooling (RCIC) Part 6*
105	Reactor Core Isolation Cooling (RCIC) Part 6A*
106	Reactor Core Isolation Cooling (RCIC) Part 8*
112B	Reactor Coolant Water (RCW) Part 12*
112B	Reactor Coolant Water (RCW) Part 12B*
116	Reactor Coolant Water (RCW) Part 7
117	Reactor Coolant Water (RCW) Part 8*
118	Reactor Coolant Water (RCW) Part 11*
118	Reactor Coolant Water (RCW) Part 11*
118	Reactor Coolant Water (RCW) Part 11A*
119	Service Water (SW) Part 10*
119	Service Water (SW) Part 10*
119	Service Water (SW) Part 10*
119	Service Water (SW) Part 10*

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Total Cumulative 51

PIPE STRESS
PROBLEM NO.

PIPING SYSTEM

119	Service Water (SW) Part 10*
120	Service Water (SW) Part 10A*
121	Service Water (SW) Part 4*
121	Service Water (SW) Part 4*
121	Service Water (SW) Part 4*
122	Service Water (SW) Part 4A*
130	Service Water (SW) Part 2A*
134	Residual Heat Removal (RHR) Part 11*
134	Residual Heat Removal (RHR) Part 11*
134	Residual Heat Removal (RHR) Part 11*
134	Residual Heat Removal (RHR) Part 11*
134	Residual Heat Removal (RHR) Part 11*
134	Residual Heat Removal (RHR) Part 14*
134	Residual Heat Removal (RHR) Part 5A*
134	Residual Heat Removal (RHR) Part 11D*
134	Service Water (SW) Part 2*
134	Service Water (SW) Part 2
134	Service Water (SW) Part 2*
134	Service Water (SW) Part 2*
135	Residual Heat Removal (RHR) Part 12*
135	Residual Heat Removal (RHR) Part 12*
135	Residual Heat Removal (RHR) Part 12*
135	Residual Heat Removal (RHR) Part 12*
136	Residual Heat Removal (RHR) Part 13
136	Residual Heat Removal (RHR) Part 13*
137	Residual Heat Removal (RHR) Part 11A*

26 This sheet

TOTAL Cum = 77

PIPE STRESS
PROBLEM NO.

PIPING SYSTEM

138	Residual Heat Removal (RHR) Part 15*
139	Residual Heat Removal (RHR) Part 11B*
151	Standby Gas Treatment (SGT) Part 3*
161	Standby Liquid Control (SLC) Part 3*
170	Service Water (SW) Part 1*
170	Service Water (SW) Part 1*
171	Service Water (SW) Part 1A*
172	Service Water (SW) Part 3*
172	Service Water (SW) Part 3*
172	Service Water (SW) Part 3*
172	Service Water (SW) Part 3*
173	Service Water (SW) Part 7*
173	Service Water (SW) Part 7*
173	Service Water (SW) Part 7A*
175	Service Water (SW) Part 6*
175	Service Water (SW) Part 6*
177	Service Water (SW) Parts 8, 8A*
178	Service Water (SW) Part 9*
180	Service Water (SW) Part 11*
181	Service Water (SW) Part 12*
181	Service Water (SW) Part 12*
182	Service Water (SW) Part 13*
182	Service Water (SW) Part 13*
183	Service Water (SW) Part 14*
183	Service Water (SW) Part 14*
190	Main Steam Drain (MSD) Part 2*

PIPE STRESS
PROBLEM NO.

PIPING SYSTEM

190	Main Steam Drain (MSD) Part 2*
190	Main Steam Drain (MSD) Part 2A
190	Main Steam Drain (MSD) Part 2B
191	Feedwater (FDW) Part 5B
191	Feedwater (FDW) Part 5C
192	Feedwater (FDW) Part 5A
201	Fuel Oil (FO) Part 3*
201	Fuel Oil (FO) Part 3*
201	Fuel Oil (FO) Part 3
201	Fuel Oil (FO) Part 3*
201	Fuel Oil (FO) Part 3*
211	Radwaste (RW) Part 2*
220	Service Air (SA) Part 1*
221	Service Air (SA) Part 2*
300	Service Water (SW) Part 1B*
301	Service Water (SW) Parts 6A & 9A*
302	Service Water (SW) Part 4B
303	Service Water (SW) Part 10B
304	Service Water (SW) Part 2C
305	Service Water (SW) Part 15*
305	Service Water (SW) Part 15
306	Service Water (SW) Part 2D*
307	Residual Heat Removal (RHR) Part 16*
RCIC/10	Reactor Core Isolation Cooling (RCIC) Part 10
HPCI/10	High Pressure Coolant Injection (HPCI) Part 10
SLC/4	Standby Liquid Control (SLC) Part 4

28 This Sheet

Current = 129

PIPE STRESS
PROBLEM NO.

PIPING SYSTEM

AC/3 & 4

Atmospheric Control (AC) Part 3

AC/3 & 4

Atmospheric Control (AC) Part 4

- NOTES: 1) The system and part numbers listed above are the extent of the Vermont Yankee Seismic Re-Analysis Program to date.
- 2) *Indicates drawings included in Enclosure (C), Highlighting Supports Requiring Modifications or the addition of new supports.

What % of Total is this.

2 This sheet

Cur Test = 13!