

LICENSEE: Vermont Yankee Nuclear Power Corporation

January 16, 1997

FACILITY: Vermont Yankee Nuclear Power Station

SUBJECT: SUMMARY OF MEETING WITH REPRESENTATIVES OF VERMONT YANKEE NUCLEAR POWER CORPORATION ON DECEMBER 23, 1996, IN THE OFFICES OF THE NRC CONCERNING A PLANNED PARTNERSHIP ARRANGEMENT TO PREPARE RELOAD ANALYSIS FOR FUEL CYCLE 20

On December 20, 1996, the NRC staff met with representatives of Vermont Yankee Nuclear Power Corporation (VYNPC, the licensee) at the licensee's request to be briefed on VYNPC's plans for analysis in preparation for Vermont Yankee (VY) fuel cycle 20 reload. A list of meeting attendees is included as Enclosure 1. Enclosure 2 are copies of the licensee's handouts.

Fuel for fuel cycle 20 will be ordered in March of 1997 although fuel is not scheduled for core loading until March 1998. Fuel of the GE 13 (9x9) design is planned for the reload, rather than the GE 8 (8x8) fuel design most recently used. Core design will be based on an 18-month fuel cycle with 97% operating efficiency. The final contract for design of the core had not been closed at the time of the meeting, but VYNPC senior management have decided on the approach to be used.

VYNPC plans to enter into a contract in which core design is performed by General Electric (GE) with independent GE oversight by Yankee Nuclear Services Division (YNSD), and YNSD in-turn over seen by VYNPC. VYNPC pointed out advantages and high expectations for this arrangement. Advantages included independent analysis of VY's loss-of-coolant with RELAP 5YA and with the SAFER/GESTR codes in order to identify differences. Once differences are identified and understood they will be resolved in a conservative manner as appropriate.

Other major licensing matters discussed included: 1) VYNPC status of 50.54f response - VYNPC expects to meet the schedule; 2) valve MS 77 leak response plans - no recent degradation has been observed. Plans for repair or replacement are proceeding simultaneously and 3) electronic data base for licensing correspondence. This is expected to be ready in the spring of 1997.

original signed by A. Wang for

Vernon L. Rooney, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-271

- Enclosures: 1. List of meeting attendees
- 2. VYNPC Handouts

cc w/encls: See next page

DOCUMENT NAME: G:\VERMONT\MTGSUM

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PM:PDI-1	E	LA:PDI-1	D:PDI-1			
NAME	VRooney/rsl		SLittle	SBajwa			
DATE	01/16/97		01/13/97	01/16/97	01/ /97		01/ /97

Official Record Copy

9701220388 970116  
PDR ADOCK 05000271  
P PDR

**NRC FILE CENTER COPY**



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 16, 1997

LICENSEE: Vermont Yankee Nuclear Power Corporation  
FACILITY: Vermont Yankee Nuclear Power Station  
SUBJECT: SUMMARY OF MEETING WITH REPRESENTATIVES OF VERMONT YANKEE NUCLEAR POWER CORPORATION ON DECEMBER 23, 1996, IN THE OFFICES OF THE NRC CONCERNING A PLANNED PARTNERSHIP ARRANGEMENT TO PREPARE RELOAD ANALYSIS FOR FUEL CYCLE 20

On December 20, 1996, the NRC staff met with representatives of Vermont Yankee Nuclear Power Corporation (VYNPC, the licensee) at the licensee's request to be briefed on VYNPC's plans for analysis in preparation for Vermont Yankee (VY) fuel cycle 20 reload. A list of meeting attendees is included as Enclosure 1. Enclosure 2 are copies of the licensee's handouts.

Fuel for fuel cycle 20 will be ordered in March of 1997 although fuel is not scheduled for core loading until March 1998. Fuel of the GE 13 (9x9) design is planned for the reload, rather than the GE 8 (8x8) fuel design most recently used. Core design will be based on an 18-month fuel cycle with 97% operating efficiency. The final contract for design of the core had not been closed at the time of the meeting, but VYNPC senior management have decided on the approach to be used.

VYNPC plans to enter into a contract in which core design is performed by General Electric (GE) with independent GE oversight by Yankee Nuclear Services Division (YNSD), and YNSD in-turn over seen by VYNPC. VYNPC pointed out advantages and high expectations for this arrangement. Advantages included independent analysis of VY's loss-of-coolant with RELAP 5YA and with the SAFER/GESTR codes in order to identify differences. Once differences are identified and understood they will be resolved in a conservative manner as appropriate.

Other major licensing matters discussed included: 1) VYNPC status of 50.54f response - VYNPC expects to meet the schedule; 2) valve MS 77 leak response plans - no recent degradation has been observed. Plans for repair or replacement are proceeding simultaneously and 3) electronic data base for licensing correspondence. This is expected to be ready in the spring of 1997.

*Alan Wang For*

Vernon L. Rooney, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosures: 1. List of meeting attendees  
2. VYNPC Handouts

cc w/encls: See next page

Vermont Yankee Nuclear Power Station

Vermont Yankee Nuclear Power  
Corporation

cc:

Regional Administrator, Region I  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

G. Dana Bisbee, Esq.  
Deputy Attorney General  
33 Capitol Street  
Concord, NH 03301-6937

R. K. Gad, III  
Ropes & Gray  
One International Place  
Boston, MA 02110-2624

Resident Inspector  
Vermont Yankee Nuclear Power Station  
U.S. Nuclear Regulatory Commission  
P.O. Box 176  
Vernon, VT 05354

Mr. Richard P. Sedano, Commissioner  
Vermont Department of Public Service  
120 State Street, 3rd Floor  
Montpelier, VT 05602

Chief, Safety Unit  
Office of the Attorney General  
One Ashburton Place, 19th Floor  
Boston, MA 02108

Public Service Board  
State of Vermont  
120 State Street  
Montpelier, VT 05602

Mr. David Rodham, Director  
ATTN: James Muckerheide  
Massachusetts Civil Defense Agency  
400 Worcester Rd.  
P.O. Box 1496  
Framingham, MA 01701-0317

Chairman, Board of Selectmen  
Town of Vernon  
P.O. Box 116  
Vernon, VT 05354-0116

Mr. Raymond M. McCandless  
Vermont Division of Occupational  
and Radiological Health  
Administration Building  
Montpelier, VT 05602

Mr. Richard E. McCullough  
Operating Experience Coordinator  
Vermont Yankee Nuclear Power Station  
P.O. Box 157  
Governor Hunt Road  
Vernon, VT 05354

Mr. J. J. Duffy  
Licensing Engineer  
Vermont Yankee Nuclear Power  
Corporation  
580 Main Street  
Bolton, MA 01740-1398

Mr. Donald A. Reid  
Vice President, Operations  
Vermont Yankee Nuclear Power  
Corporation  
Ferry Road  
Brattleboro, VT 05301

Mr. Robert J. Wanczyk, Plant Manager  
Vermont Yankee Nuclear Power Station  
P.O. Box 157, Governor Hunt Road  
Vernon, VT 05354

Mr. Ross B. Barkhurst, President  
Vermont Yankee Nuclear Power Corporation  
Ferry Road  
Brattleboro, VT 05301

Meeting Summary Memorandum

HARD COPY w/all enclosures

Docket File

PUBLIC

PDI-1 R/F

OGC

ACRS

EMAIL w/enclosure 1

F. Miraglia/A. Thadani (A)

R. Zimmerman

S. Varga

J. Zwolinski

S. Bajwa

V. Rooney

S. Little

E. Jordan

W. Dean

R. Conte, Region 1

Ta Huang

Ron Frahm

E. D. Kendrick



MEB

DFOI/1

220041

LIST OF ATTENDEES  
MEETING WITH REPRESENTATIVES OF  
VERMONT YANKEE NUCLEAR POWER CORPORATION  
CONCERNING A PLANNED PARTNERSHIP ARRANGEMENT  
TO PREPARE RELOAD ANALYSIS FOR FUEL CYCLE 20  
VERMONT YANKEE NUCLEAR POWER PLANT  
DECEMBER 20, 1996

<u>NAME</u>	<u>ORGANIZATION</u>
Vernon Rooney	NRR/PDI-1
S. Singh Bajwa	NRR/PDI-1
Ta Huang	NRC/DSSA/SRXB
Ron Frahm	NRC/DSSA/SRXB
E. D. Kendrick	NRC/DSSA/SRXB
Frank Helin	Vermont Yankee
Edward L. Harms	Vermont Yankee
Tom Harrison	McGraw Hill
Jim Duffy	Vermont Yankee
Bob Sojka	Vermont Yankee

## *Receptive To Change*

NRR Presentation  
December 23, 1996

Vermont Yankee

## *VY/GE/YNSD Partnership*

- ❖ Transition to GE 13 Fuel Design
- ❖ Reload Design, Bundle Design, Mechanical Design, Core Follow
- ❖ Independent Verification
- ❖ Management Oversight
- ❖ Redundant LOCA
- ❖ More Expensive Alternative

Vermont Yankee

## *Transition Process*

- ❖ Senior Management Decision
- ❖ Process Similar To Design Change
- ❖ Operations Involvement & Training
- ❖ Stability & SOER Recognition
- ❖ Long Lead Times
- ❖ Third Party Reviews

Vermont Yankee

## *Partnership Synergy*

- |                      |                     |
|----------------------|---------------------|
| ❖ General Electric   | ❖ Vermont Yankee    |
| - Safer/Gestr        | - Safety Culture    |
| - GE 13 Experience   | - Experienced Staff |
| - Industry Awareness | - Engaged Mgt.      |
| - Method Consistency | - Aggressive PORC   |
| - Approved Methods   | - Dedicated Staff   |
| - DBD Understanding  | - Ownership         |
| - Skilled Expertise  | - Responsiveness    |

Vermont Yankee



## *Improvement Expectations*

- ❖ Independent Verification of Margins
- ❖ Consistency With BWR Fleet
- ❖ Expanded Industry Knowledge
- ❖ Greater Management Oversight
- ❖ Minimize Transition Risk
- ❖ Positive Mix Of Expertise & Tools
- ❖ Higher Quality Products

Vermont Yankee

## *Best Utility Position For;*

- ❖ Issues Emerging From ITS, DBD & ISP
- ❖ MEOD, ARTS, MELLA & Uprate
- ❖ Maintenance of CLB & DBD
- ❖ Response to Industry Issues
- ❖ Finding & Fixing Our Own Problems
- ❖ Core Performance Monitoring

Vermont Yankee

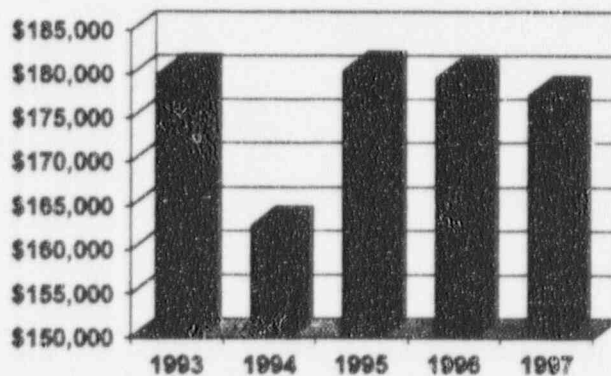


## Evidence of Culture Changes

- ◆ New CEO
- ◆ Eleven YNSD Cycles
- ◆ Plant Condition
- ◆ New FDW Heaters
- ◆ Core Shroud Repair
- ◆ 1996 LER's
- ◆ ITS, ISP, DBD
- ◆ Self Assessment
- ◆ Licensing
- ◆ Appendix R, J
- ◆ IST, MOV, FAA
- ◆ Event Reports
- ◆ System Engineers
- ◆ Business Plan
- ◆ Engineering
- ◆ \$6.5 Mil DBD

Vermont Yankee

## Total Operating Revenue (Fuel + Capacity Costs in \$000)



Vermont Yankee