# VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

REPLY 10

ENGINEERING OFFICE 580 MAIN STREET EOLTON, MA 01740 (608) 779-6711

November 22, 1989 P/Y 89-108

United States Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

a.

References:

- License No. DPR-28 (Docket No. 50-271) Letter, USNRC to All Holders of Operating Licenses and Construction b. Permits for Nuclear Power Reactors, N 'Y 89-210, "Request for Information Concerning Status of Implementation of Unresolved Safety Issue (USI)
- Requirements (Generic Letter 89-21)", dated October 19, 1989. Vermont Yankee Response to NRC Generic Letter 89-21, "Request for Subject: Information Concerning Status of Implementation of Unresolved Safety Issue (USI) Requirements".

Dear Sir:

The purpose of this letter is to provide Vermont Yankee's response to Generic Letter 89-21 [Reference (b)]. which was received by Vermont Yankee on October 27, 1989.

Reference (b) requested all licensees to review and report, within 30 days of letter receipt, on the status of implementation of Unresolved Safety Issues (USI's) for which a final 'echnical resolution has been achieved and which are applicable to their facility. To respond to the Generic Letter, NRC requested all licensees to provide their respective responses in the format of Enclosure 1 of Reference (b), expanding upon the information that has been received under separate cover from the NRC Project Manager.

Please find Enclosure 1 attached to this letter. This enclosure has been prepared utilizing the guidance provided in Reference (b). Where deemed necessary, a supplementary note has been included to provide further explanation regarding the status of certain issues.

We trust that the enclosed information is responsive to your request. Should you have any further questions regarding this matter, please contact this office.

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Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Leonard A. Tremblay, Jr. Senior Licensing Engineer

**USNRC** Region I Administrator cc: **USNRC** Resident Inspector - VYNPS USNRC Project Manager - VYNPS

# Vermont Yankee Implementation Status for

## Unresolved Safety Issues for Which a Final Technical Resolution Has Been Achieved

USI/MPA Number	Title	Ref. Document	Applicability	Status/Date*	Remarks
A-1	Water Kammer	SECY 84-119 NUREG-0927, Rev. 1; NUREG-0993, Rev. 1; NUREG-0737, Item I.A.2.3 SRP Revisions	A11	NC	
A-2/MPA D-10	Asymmetric Blowdown Loads on Reactor Primary Coolant Systems	NUREG-0609, GL 84-04, GDC-4	PWR	NA	
A-3	Westinghouse Steam Generator Tube Integrity	NUREG-0844, SECY 86-97 SECY 88-272 GL 85-02 (No Requirements)	W-PWR	NA	
A-4	CE Stear Generator Tube Integrity	NUREG-0844, SECY 86-97 SECY 88-272 GL 85-02 (No Requirements)	CE-PWR	NA	
A-5	B&W Steam Generator Tube Integrity	NUREG-0844, SECY 86-97 SECY 88-272 GL 85-02 (No Requirements)	B&W PWR	NA	
A -6	Mark I Containment Short-Term Program	NUREG-0408	Mark I-BWR	C/Per NUREG-0408 issue date 12/1977	See A-7

\* C - Complete

NC - No Changes Necessary

NA - Not Applicable

I - Incomplete

# Vermont Yankee Implementation Status for

## Unresolved Safety Issues for Which a Final Technical Resolution Has Reen Achieved (Continued)

USI/MPA Number	Title	Ref. Document	Applicability	Status/Date*	Remarks
A-7/D-01	Mark I Long-Term Program	NUREG-0661, NUREG-0661 Suyyl. 1, GL 79-57	Mark I-BWR	C/Note 1	NVY 84-151 (7/2/84)
A-8	Mark II Containment Pool Dynamic Loads	NUREG-0808, NUREG-0487 Suppl. 1/2, NUREG-0802, SRP 6.2.1.1C, GDC 16	Mark II-BWR	NA	
A-9	Anticipated Transients Without Scram	NUREG-0460, Vol. 4 10CFR50.62	A]]	C/Note 2	NVY 89-121 (5/31/89) FVY 87-41 (4/10/87)
A-10/MPA B-25	BWR Feedwater Nozzle Cracking	NUREG-0619, Letter from DG Eisenhut, dated 11/13/80, GL 81-11	BWR	C/Note 6	NVY 84-144 (6/27/84)
A-11	Reactor "essel Material Toughness	NUREG-0744, Rev. 1, 10CFR56.60/82-26	A11	C 6/24/86	NVY 86-121 (6/24/86) FVY 85-46 (5/10/85)
A-12	Fracture Toughness of Steam Generator and Reactor Coolant Pump Supports	NUREG-0577, Rev. 1, SRP Revision 5.3.4	PWR	NA	

\* C - Complete

NC - No Changes Necessary

NA - Not Applicable

I - Incomplete

#### Vermont Yankee Implementation Status for

# Unresolved Safety Issues for Which a Final Technical Resolution Has Been Achieved (Continued)

UST/MPA Number	Title	Ref. Document	Applicability	Status/Date*	Remarks
A-17	Systems Interactions	Ltr: DeYoung to Licensees - 9/72, NUREG-1174, NUREG-1229, NUREG/CR-3922, NUREG/CR-426 NUREG/CR-4470, GL 89-18 (No Requirements)	A11	ЖС	
/ .4/MPA B-60	Qualification of Class 1E Safety-Related Equipment	NUREG-0588, Rev. 1, SRP 3.11, 10CFR50.49, GL 82-09, GL 84-24, GL 85-15	A11	C/Note 3	NVY 84-263 (12/12/84)
A-26/MPA B-04	Reactor Vessel Pressure Transient Protection	DOR Letters to 'licensees 8/76, NUREG-0224, NUREG-0371, SRP 5.2, GL 88-11	PWR	NA	
A-31	Rosidual Heat Removal Shutdown Requirements	NUREG-0606, RG 1.113, RG 1.139, SRP 5.4.7	All OLs After 01/79	NA	

\* C - Complete

NC - Nc Changes Necessary

NA - Not Applicable

I - Incomplete

#### Verm at Yankee Implementation Status for

#### Unresolved Safety Issues for Which a Final Techa 1 Resolution Has Been Achieved (Continued)

USI/MPA Number	Title	Ref. Document	A. licability	Status/Date*	Remarks
A-36/C-10, C-15	Control of Heavy Loads Near Spent Fiel	NUREG-0612, SRP 9.1.5 GL 81-07, GL 83-42, GL 85-11, Letter from DG Eisenhut, dated 12/22/80	Ali	C/Phase I/ Approx. 8/1964 C/Phase II/ 6/28/85	NVY 84-139 (6/27/84) GL 85-11 (6/28/85) FVY 84-51 (5/21/84)
A-39	Decermination of SRV Pool Dynamic Loads and Pressure Transients	NUREG-0802, NUREGs-0763, 0783, 0802, NUREG-0661, SRP 6.2.1.1.C	BWR	NC	Incorporated into A-7
A-40	Seismic Design Criteria	SRP Revisior«, NUREG/ CR-4776, NUREG/CR-0054, NUREG/CR-3480, NUREG/ CR-1582, NUREG/CR-1161, NUREG-1233, NUREG/CR-1161, NUREG/CR-3805, NUREG/ CR-5347, NUREG/CR-3509	A11	NC	Incorporated into A-45
A-42/MPA B-05	Pipe Cracks in Boiling Water Reactors	NUREG-0313, Rev. 1, NUREG-0313, Rev. 2, CL 81-03, GL 88-01	BWR	C/Note 8	Incorporated into Generic Letter 88-01 Requirements FVY 88-62

\* C - Complete

NC - No Changes cessary

NA - Not Applicat e

I - Incomplete

E - Evaluating Actions Required

(7/27/88)

#### Vermont Yankee Implementation Status for

## Unresolved Safety Issues for Which a Final Technical Resolution Has Been Achieved (Continued)

USI/MPA Number	Title	Ref. Document	Applicability	Status/Date*	Remarks
A-43	Contaiament Emergency Sump Performance	NUREG-0510, NUREG-0869, Rev. 1, NUREG-0897, R.G.1.82 (Rev.0), SRP 6.2.2, GL 85-22 (No Requirements)	A11	NC	
A-44	Station Blackout	RG 1.155, NURZG-1032, NUREG-1109, 10CFR50.63	A11	I/Note 4	BVY 89-36 (4/12/89)
A-45	Shutdown Decay Heat Removal Requirements	SECY 88-260, NUREG-1289, NUREG/CR-5230, SECY 88-260 (No Requirements)	A11	NC	Incorporated into IPE Program
A-46	Seismic Qualification of Equipment in Operating Plants	NUREG-1030, NUREG-1211/ GL 87-02, GL 87-03	A11	I/Note 5	FVY-88-82 (9/30/88)
A-47	Safety Implication of Control Systems	NUREG-1217, NUREC-1218, GL 89-19	A11	E/ 3/19/90	

\* C - Complete

NC - No Changes Necessary

NA - Not Applicable

I - Incomplete

# Vermont Yankee Implementation Status for

#### Unresolved Safety Issues for Which a Final Technical Resolution Has Been Achieved (Continued)

-6-

USI/MPA Number	Title	Ref. Document	Applicability	Status/Date*	Remarks
A-48	Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment	10CFR50.44, SECY 89-122	All, except PWRs with large dry containments	C/ 9/85 Note 7	NVY 85-193 (9/10/85) FVY 84-128 (10/31/84) FVY 34-104 (8/24/84)
A-49	Pressurized Thermal Shock	RCs 1.154, 1.99, SFCY 82-465, SECY 83-288, SECY 81-687, 10CFR 50.61/ G1 88-11	PWR	NA	

\* C - Complete

NC - No Changes Necessary

NA - Not Ap, licable

I - Incomplete

#### Notes

- The Vermont Yankee Plant Unique Analys's Report (PUAR), Revision 1 for the Mark I Containment was completed on 4/8/83. Subsequently, as the result of an audit, additional information on this subject was requested for resolution. A final meeting on 2/1984 led to the closing of all remaining open items. The NRC issued Safety Evaluations on 7/2/84 (NVY 34-151).
- 2. Vermont Yankee believed that all requirements with respect to USI A-9 would be completed following the 1987 shutdown outage as referenced in FVY 85-93, dated 9/29/65. This belief was supported by NRC Letter NVY 87-04, dated 1/8/87, which detailed licensee requirements. Vermont Yankee provided plant-specific information to demonstrate ATWS rule compliance in FVY 87-41, dated 4/10/87, and completed all implementation requirements during the 1987 refueling outage. Vermont Yankee believes that all implementation requirements of A-9 have been completed. Subsequently, the NRC identified a technical issue concerning the diversity of ATWS equipment which remains outstanding for Vermont Yankee and other BWRs (reference NRC Letter NVY 89-121, dated 5/31/89). This issue is in the process of being resolved generically with the BWR Owners Group (BWROG). In addition, Vermont Yankee is awaiting approval of proposed Technical Specifications charges regarding the ATWS rule as described in Vermont Yankee Letter BVY 89-44 (Proposed Change No. 147), dated 5/12/89.
- NRC Letter NVY 84-263, dated 12/12/84, provided a Safety Evaluation which concluded that Vermont Yankee Nuclear Power Corporation's Equipment Qualification Program is in compliance with the requirements of 10CFR 50.49.
- 4. Vermont Yankee Letter BVY-89-36, dated 4/12/89, provides a response to USI A-44. As discussed in the letter, control circuit modifications (hardware) are to be implemented no later than 1992. Vernon Hydroelectric Station tie line modifications (hardware) required by Vermont Yankee will be coordinated with other proposed modifications at the hydrostation to take place over the next three years.
- 5. Vermont Yankee plans to perform the seismic verification plant walkdown required by the Generic Implementation Procedure (GIP) by the conclusion of the second refueling outage after receipt of the final SER Supplement resolving all open issues. This schedule is subject to re-evaluation and change as described in Vermont Yankee letter FVY 88-82, dated 9/30/88.
- 6. Varmont Yankee installed interference-fit thermal sleeve spargers in 1976. In addition, a thermal sleeve Bypass Leak Detection System was installed during the 1981 refueling outage. The Control Rod Drive (CRD) return line was rerouted to RWCU System in 1979. Vermont Yankee continues to be committed to perform routine inspections of the feedwater nozzles and spargers. NEC Letter NVY 87-123, dated 8/7/87, describes the current approval status of the feedwater nozzle.
- 7. Modifications were completed during the 1985 refueling outage.

#### Notec (Continued)

 USI A-42 requirements were incorporated into NUREG-0313, Revision 1, which was transmitted via Generic Letter 88-01. Vermont Yankee's detailed description of meeting Generic Letter 38-01 requirements was provided in Vermont Yankee Letter FVY 88-62, dated 7/27/88.