

\*84 MAR 19 A10:40

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Docket Nos.  
50-443, -444

## Introduction

NENCP moves that the Board admit this supplemental emergency planning contention, which is based on Applicants' recently available Probabilistic Safety Assessment. The contention meets the NRC's standards for late-filed contentions, as discussed below.

## Contention

The New Hampshire state and local emergency response plans do not comply with the requirements of 10 C.F.R. § 50.47(b)(5), Section IV. D.3 of Appendix E to 10 C.F.R. Part 50, or NUREG-0654 § II.E.6, in that the audible alert systems on which they rely cannot be depended upon to provide prompt notification to the public in an emergency.

B403200036 B40315  
PDR ADCK 0500043  
PDR

DS03

Basis:

Under NRC regulations, operating license applicants must demonstrate the existence of "means to provide early notification" of an emergency to the public within the plume exposure pathway Emergency Planning Zone. 10 C.F.R. § 50.47(b)(5). The notification system must be designed "to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes." Appendix E, § IV.D.3. The notification system must assure direct coverage of essentially 100% of the public within 5 miles of the plant in 15 minutes, and provide special arrangements to notify 100% of the population in the entire EPZ within 45 minutes. NUREG-0654, Appendix 3, implementing § II.E.6.

The radiological emergency response plan for the state of New Hampshire relies on sirens and NOAA tone alert weather radios for initial alerting in the EPZ. RERP at 2.1-7. Local plans rely on sirens, tone-activated radios, and mobile public-address units for initial public notification. See local plans, § II.A. These audible alert systems have not been designed yet.

To the extent that any of these systems depend upon offsite power sources to operate, they cannot be relied upon to function during an accident at Seabrook. The Seabrook Station Probabilistic Safety Assessment ("PSA") prepared for Applicants by Pickard, Lowe and Garrick, Inc. in December of 1983, demonstrates that over half of the accidents at Seabrook

leading to a significant radioactive release (and thus requiring an emergency response) would involve a loss of offsite power.\* Therefore the sirens and any other notification devices dependent upon offsite power are likely to be disabled and rendered useless in an emergency at Seabrook. In order to provide the necessary reasonable assurance that the populace in the EPZ can be notified promptly of an emergency, Applicants should provide for some alternative, independently powered audible alert system to compensate for failure of the sirens or other offsite power-dependent notification systems.

---

\* NECNP used statistics provided in Applicants' PSA to calculate that 55% of core melt accidents leading to a significant radioactive release would involve loss of offsite power. Of the six release categories defined in the PSA, NECNP considered those categories that would involve containment breach and lead to a major radioactive release, thus triggering an offsite emergency response. These release categories consisted of the following:

RELEASE CATEGORY DESCRIPTION	FREQUENCY	
S6V -- large containment bypass	$2.4 \times 10^{-6}$	1:417,000
S2V -- small containment bypass	$1.8 \times 10^{-5}$	1: 56,000
S3V -- late overpressure failure with vaporization release	$8.0 \times 10^{-5}$	1: 12,500
S3 -- late overpressure with no vaporization release	$5.8 \times 10^{-5}$	1: 17,200

The overall core melt frequency from these category releases is  $1.6 \times 10^{-4}$  or about 1:6,250.

The PSA demonstrates that loss of offsite power events contribute to about 38% of the total frequency of core melts leading to significant releases, or  $6.0 \times 10^{-5}$ . See PSA Table 2.3-3, attached. Seismic events, which cause a loss of offsite power by failing insulators on the distribution lines, contribute to about 17% of the total core melt frequency leading to a significant release, or  $2.7 \times 10^{-5}$ . Id. Thus, loss of offsite power is involved in at least 55% of all core melt accidents which lead to atmospheric containment failure.

Justification for Late Filing of Contention

This contention meets the requirements of 10 C.F.R. §§ 2.714(a)(1) and (b) for admission of late-filed contentions.

1. NECNP has good cause to file the contention at this time. The contention relies principally on the Probabilistic Safety Assessment prepared by Pickard, Lowe, and Garrick for Applicants in December of 1983. That PSA did not reach the NRC's Public Document Room until January 30, 1984. As soon as NECNP learned that the study was in the PDR we immediately obtained expert assistance in interpreting the PSA, which consists largely of statistical tables and computer printouts. This contention is filed promptly.

2. NECNP knows of no other means by which our interest in this issue can be protected, since the Atomic Safety and Licensing Board is the only tribunal which can consider it.

3. NECNP's participation in litigating this issue can be reasonably expected to contribute substantially to the record of the hearing. We have already obtained expert assistance in interpreting the PSA data, and expect to continue to contribute that expertise to the hearing record.

4. NECNP knows of no other party that has raised this particular issue before the Licensing Board.

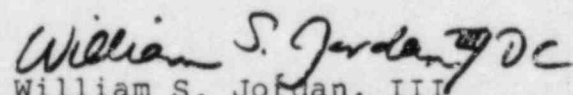
5. Litigation of this contention will not broaden or delay the proceeding beyond the scope and timing already expected. The Board can reasonably expect that once the design of the

audible alert system is submitted, parties will file contentions on the adequacy of the design. In fact, admission of this contention now may expedite the hearings by notifying other parties of NECNP's concerns regarding the design of the audible alert system before the design is completed.

We consider that the plans' stated intention to rely in part on sirens, coupled with the information revealed in the PSA, is sufficient basis for admission of a contention at this point. The issues will be clarified, however, when the design of the audible alert system, showing the extent to which the system relies on sirens and other offsite power-dependent systems, is submitted. Thus admission of this contention now will permit more orderly and expeditious litigation of the adequacy of the audible alert system once the design become available.

Respectfully submitted,

  
Diane Curran

  
William S. Jordan, III  
HARMON, WEISS JORDAN  
1725 I Street, N.W.  
Suite 506  
Washington, D.C. 20006  
(202) 833-9070

Dated: March 15, 1984



TABLE 2.3-3. CONTRIBUTIONS OF SEQUENCES GROUPED BY INITIATING EVENT TO FREQUENCY OF RISK  
SIGNIFICANT RELEASE CATEGORIES AND CORE MELT

Initiating Event Group	Initiating Event	Release Category Frequency Contributions (events per reactor year)						Core Melt Frequency Contributions (events per reactor year)
		Large Containment Bypass S6V	Small Containment Bypass S2V	Basemat Melt-Through S4V	Late Overpressure with Vaporization Release S3V	Late Overpressure - No Vaporization Release S3	Containment Intact S5	
Loss of Coolant Inventory	Large LOCA	*	*	*	*	*	1.1-6	1.4-6
	Small LOCA	*	*	*	*	2.5-6	1.7-5	2.0-5
	Interfacing Systems LOCA	1.8-6	0	0	0	0	0	1.8-6
	Steam Generator Tube Rupture	*	*	1.0-7	8.2-7	*	6.5-7	1.7-6
General Transients	Reactor Trip	*	*	*	*	6.3-6	6.2-6	1.3-5
	Turbine Trip	*	*	*	*	3.9-6	3.9-6	1.0-5
	Loss of Main Feedwater	*	*	1.0-6	8.3-6	*	*	1.1-5
	Partial Feedwater Loss	*	*	*	*	5.0-6	2.6-6	7.8-6
	Excessive Feedwater	*	*	*	*	2.8-6	2.7-6	5.7-6
	Loss of Condenser Vacuum	*	*	*	*	*	8.9-7	1.1-6
	MSIV Closure	*	*	*	*	*	4.9-6	5.0-6
	Loss of Primary Flow	*	*	*	*	1.2-6	1.1-6	2.4-6
	Steam Line Break	*	*	*	*	*	6.9-6	7.3-6
	Main Steam Relief Opens	*	*	*	*	5.0-7	1.4-7	7.8-7
Common Cause Initiating Events - Support System Faults	Loss of Offsite Power	*	*	6.8-6	5.5-5	4.9-6	1.5-6	6.9-5
	Loss of One DC Bus	*	*	*	*	*	1.7-6	2.3-6
	Loss of Service Water	*	*	*	*	2.5-6	0	2.5-6
	Loss of Component Cooling	*	*	*	*	1.4-6	0	1.4-6
- External Events	Seismic Events (total)	5.8-7	1.7-5	5.3-7	4.0-6	2.9-6	2.8-6	2.8-5
	Fires (total)	*	*	6.6-7	5.3-6	2.0-5	*	2.5-5
	Flood (total)	*	*	2.3-7	1.9-6	1.8-6	*	3.9-6
	Truck Crash	*	*	1.8-7	1.4-6	1.4-7	*	1.8-6
Total		2.4-6	1.8-5	1.0-5	8.0-5	5.8-5	6.0-5	2.3-4

\*Less than 1% contribution to release category frequency.

NOTE: Exponential notation is indicated in abbreviated form; i.e., 1.1-6 =  $1.1 \times 10^{-6}$ .

CERTIFICATE OF SERVICE

I certify that on March 15, 1984, copies of NECNP MOTION TO FILE SUPPLEMENTAL CONTENTION ON NEW HAMPSHIRE STATE AND LOCAL EMERGENCY RESPONSE PLANS were served on the following by first-class mail or as otherwise indicated:

\*Helen Hoyt, Esq., Chairperson  
Atomic Safety and Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Rep. Roberta C. Pevear  
Drinkwater Road  
Hampton Falls, NH 03844

\*Dr. Emmeth A. Luebke  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Phillip Ahrens, Esq.  
Assistant Attorney General  
State House, Station #6  
Augusta, ME 04333

\*Dr. Jerry Harbour  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Robert A. Backus, Esq.  
111 Lowell Street  
Manchester, NH 03105

Atomic Safety and Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

\*\*Thomas G. Dignan, Esq.  
R. K. Gad, III, Esq.  
Ropes and Gray  
225 Franklin Street  
Boston, MA 02110

Atomic Safety and Licensing Appeal  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dr. Mauray Tye, President  
Sun Valley Association  
209 Summer Street  
Haverhill, MA 01830

Docketing and Service  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

\*Robert G. Perlis, Esq.  
William F. Patterson, Esq.  
Office of the Executive  
Legal Director  
U.S. Nuclear Regulatory  
Commission  
Washington, DC 20555

Town Manager's Office  
Town Hall - Friend St.  
Amesbury, MA 01913

Mr. Angie Machiros  
Chairman  
Board of Selectmen  
Newbury, MA 09150

Anne Verge, Chair  
Board of Selectman  
Town Hall  
South Hampton, NH 03842

Jo Ann Shotwell, Esq.  
Assistant Attorney General  
Department of the Attorney  
General  
1 Ashburton Place, 19th Floor  
Boston, MA 02108

John B. Tanzer  
Town of Hampton  
5 Morningside Drive  
Hampton, NH 03842

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

Diana P. Sidebotham  
R.F.D.2  
Putney, VT 05346

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

Alfred V. Sargent, Chairman  
Board of Selectmen  
Town of Salisbury, MA. 01950

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

Selectmen of Northampton  
Town of Northampton  
New Hampshire 03862

\* By Hand  
\*\* By Express Mail

George Dana Bisbee, Esq.  
Edward L. Cross, Jr., Esq.  
Asst. Atty. Generals  
State House Annex  
Concord, NH 03301

Letty Hett, Selectman  
Town of Brentwood  
RFD Dalton Road  
Brentwood, NH 03833

Sandra Gavutis  
Town of Kensington  
RFD 1  
East Kensington, NH 03827

Diana P. Randall  
70 Collins Street  
Seabrook, NH 03874

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

Brian P. Cassidy, Esq.  
FEMA Region I  
J.W. McCormack Post  
Office and Courthouse  
Boston, MA. 02109

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

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

  
Diane Curran