UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION before the

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, et al.

(Seabrook Station, Units 1 and 2)

Docket Nos. 50-443-OL-1 50-444-OL-1 (On-Site Emergency Planning and Safety Issues)

AFFIDAVIT OF RICHARD J. FAIX

- I, Richard J. Faix, being on oath, depose and say as follows:
- as the Seabrook Support Engineering Team Manager. I was a member of the project team which developed the Vehicular Alert and Notification System (VANS) concept. A statement of my professional qualifications is attached hereto and marked
- 2. The purpose of this affidavit is to address allegations in Contention Bases A.1 and A.7. The allegations I address are: (1) tone coverage will not be provided at the sound pressure levels required in NUREG-0654 and FEMA-REP-10

[Basis A.1]; and (2) anyone within 100 feet of the VANS siren during its operation will suffer hearing damage [Basis A.7].

Basis A.1: Siren Tone Coverage

- 3. FEMA-REP-10 at page E-8 provides that the Design Report should demonstrate compliance with NUREG-0654/FEMA-REP-1 criteria by showing that either:
 - The expected siren sound pressure level generally exceeds 70 dBC where the population exceeds 2,000 persons per square mile and 60 dBC in other inhabited areas; or
 - The expected siren sound pressure level generally exceeds the average measured summer daytime ambient sound pressure levels by 10 dB (geographical areas with less than 2,000 persons per square mile).
- 4. I determined those areas where the population density is greater than 2,000 persons per square mile. For the Massachusetts portion of the EPZ, those areas are identified on Figure 2-2 of the Seabrook Station Public Alera and Notification System FEMA-REP-10 Design Report. This information was developed as described in the FEMA-REP-10 Design Report.
- 5. As indicated in the FEMA-REP-10 Design Report

 [pages 2-3 and 2-4, copy attached and marked "B"] and

 depicted on Figure 2-2, there are four geographical areas in

 the Massachusetts plume exposure pathway EPZ that are not

 subjected to at least 60 dBC of siren coverage based on the

sound coverage analysis. They are identified as a portion of the Parker River National Wildlife Refuge in Newbury, the area south of Crane Neck Hill Street in West Newbury, an area west of Route 113 and south of Pleasant Street in West Newbury and a portion of Parish Road in Newbury.

- 6. I examined each of these areas for permanent population in July, 1988.
- 7. The first area, a small portion of the Parker River National Wildlife Refuge in Newbury under the control of the U.S. Department of Interior, is located approximately 9.8 miles from Seabrook Station. This area does not have permanent residents and receives an influx of tourists only during the daylight hours. The access in this area is restricted to the road only.
- 8. The second area, to the south of Crane Neck Hill Street is a part of a Commonwealth of Massachusetts Wildlife Management Area. It is located approximately 11 miles from Seabrook Station. The only access to this area is via a dirt jeep trail and a power line right-of-way. This area is uninhabited.
- 9. The third area, west of Poute 113 and south of Pleasant Street is located approximately 11.2 miles from Seabrook Station. This area is currently uninhabited but under development with roads and building lots, including homes under construction but not yet occupied. This area

also includes a small segment east of Route 113 which is uninhabited.

10. The fourth area, a portion of Parish Road, is located approximately 11 miles from Seabrook Station. There is one residence in close proximity to the Newbury corporate boundary which represents the southern boundary of the plume exposure pathway EPZ. Even though this residence may lie within the 60 dBC coverage, for conservatism I have considered the residence to be outside the 60 dBC coverage.

Basis A.7: Hearing Damage

- 11. I measured distances from each of the VANS acoustic locations to adjacent permanent structures using an optical range finder.
- 12. There are structures located less than 100 feet from each of the two acoustic locations that —e co-located at the VANS staging areas. These structures are part of their respective staging areas. Provisions will be made by New Hampshire Yankee to inform people in these structures prior to siren activation.
- 13. At all of the other fourteen VANS acoustic locations, adjacent structures are located greater than 100 feet from the siren location.

Buchard J. Faix

STATE OF NEW HAMPSHIRE

Rockingham, ss.

September 16, 1988

The above-subscribed Richard J. Faix appeared before me and made oath that he had read the foregoing affidavit and that the statements set forth therein are true to the best of his knowledge.

Before '

Notary Public

My Commission Expires: 3-6-90

RICHARD J. FAIX

EDUCATION

BS Mechanical Engineering, University of Pittsburgh, Pittsburgh, PA, 1972

Masters in Business Administration, Duquesne University, Pittsburgh, PA, 1979

Registered Professional Engineer, PA

I am Currently employed by Westinghouse Electric Corporation performing a consultant and engineering lisson engineering function between Public Service of New Hampshire and Westinghouse. I have held this position since June 1986. In this position I perform engineering design functions and engineering avaluations related to the Seabrook Station.

Between 1984 and 1986 I was the Manager of the Westinghouse Support Engineering Team at the Wolf Creek. My responsibilities included directing a group design engineers to provide on-mite resolution of design questions, resolution of nonconformances and site related design changes.

From 1981 to 1984 I was the Westinghouse project engineer for the Virgii C. Summer Station. I was responsible for all commercial, technical, licensing and quality assurance matters for the NSSS scope in the station design.

From 1979 to 1981 I was employed at the Westinghouse Waltz Mill facility in the Sythetic Fuel Division. I was responsible for a portion of the design for a full scale, cold flow model of a Westinghouse coal gasifier.

From 1972 to 1979 I was employed by Westinghouse in the MSSS Fluid Systems Design group where I was responsible for the fluid systems design and flow performance analysis of Reactor Coolant Systems, Chemical and Volume Control Systems, Residual Heat Removal Systems, Safety Injection System, Containment Spray Systems, Component Cooling Systems, Muclear Sampling Systems, Spent Fuel Pool Cooling Systems, and Radwaste Systems.

then south by the access road to the lookout tower. The lookout tower itself lies outside the EPZ. The area is uninhabited.

Newfields, North of the Squamscott River

This area is approximately 10.7 miles NNW of Seabrook Station and is triangular in shape, comprising approximately 0.04 square miles. The northern base of the triangle borders on Boston and Maine Railroad. The peak of the triangle extends along a power transmission line right-of-way. The entire area lies to the east of Route 108 and New Street. A field inspection along the railroad tracks and the power transmission line right-of-way verified that the area was uninhabited.

Northwest of the Intersection of Interstate I-95 and Route 51

A field inspection verified that this area, located approximately
4.4 miles NNW of Seabrook Station and comprising an area of approximately 0.07 square miles, is uninhabited with the exception of the
Hampton Toll Booth on the exit ramp. The toll booth is alorted
by the NH DOT as part of the NHRERP.

Northwest Corner of Pease Air Force Base

This area which is located approximately 12.1 miles NNE of Skabrook Station, comprising an area of approximately 0.71 square miles, encompasses runways and access-controlled operations areas.

As depicted on Figure 2-2, there are four geographical areas in the Massachusetts portion of the Seabrook Station EPZ that are not subjected to at least 60 dBC of siren system coverage. Each of these areas, which have been field inspected by NHY representatives, are discussed below:

Parker River National Wildlife Refuge, Newbury

This area of approximately 350 feet length along Plum Island road

at the Newbury/Rowley corporate boundary is located approximately 9.8 miles SSW of Seabrook Station and comprises an area of approximately 0.08 square miles. This area does not have permanent residents, but receives an influx of tourists during the daylight hours. The area is closed after dark. Access in the area is restricted to the road only. This area is controlled by the U.S. Department of the Interior and receives supplemental institutional alerting (see Section E.6.2.4.2.c).

South Face of Crane Neck Hill in West Newbury

This area is located approximately 11 miles SW of Seabrook Station, comprises an area of approximately 0.32 square miles, and is bounded on the north by Crane Neck Hill, on the south by the EFZ boundary, on the east by a dirt road, and on the west by Georgetown Road. All roads receive the required 60 dBC sound level coverage. The area on the south side of the hill is isolated and is uninhabited.

West Newbury, West of Route 113 and South of Pleasant Street

This area located approximately 11.2 miles SW of Seabrook Station and comprises an area of 0.10 square miles lies on the west side of a hill and extends to the Merrimack River. The area lies to the south of Pleasant Street in West Newbury. The area has been field verified to be currently uninhabited, but under development.

Parish Road, Newbury

This area is a small triangle to the east of Interstate 95, located approximately 11 miles from Seabrook Station and comprises an area of approximately 0.02 square miles. The area is bounded on the west by Larkin St. and on the south by the EPZ. The area has been field verified to be uninhabited.