ROPES & GRAY T. LXF G. 225 FRANKLIN STREET BOSTON, MASSACHUSETTS 02110 (617) 423-6100 '88 SEP 23 P12:35 WASHINGTON IN PROVIDENCE TELEX NUMBER 951973 ROPES GRAY BSN 1001 PENNSYLVANIA AVENUE 30 KENNEDY PLAZA TELECOPIER (617) 423-2377 - (617) 423-7841 PROVIDENCE, R.I. 02903 30CKE WASHINGTON D.C. 2000A 11RAN TELECOPIER (202) 626-3961 (617) 423-6905 (401) 521-6400 TELECOPIER (401) 521-0910 September 19, 1988 Office of the Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555 ATTENTION: Docketing and Service Branch Re: Public Service Company of New Hampshire, et al. Docket Nos. 50-443-OL-1 & 50-444-OL-1 Dear Sir: It has come to our attention that the Affidavit of Sebastian N. Caruso filed September 17, 1988, by the Applicants was missing an attachment marked "D". Enclosed herewith is the single page attachment and two conformed copies. Very truly yours, JPT/kdr Enclosures

cc: Service List

8810030041 880919 PDR ADOCK 05000443 G SEP 19 188 12143 (HY, E-PLH) WIND TUNNER / EST KEYORT

Caruso Attachment D, 1 of 1

IONEERS IN SAFETY SIGNALS

July 18, 1988

ENGINEERING COMPANY
ublic Service Company of New Hampshire .O. BOX 300 eabrook, New Hampshire 03874

ttn: Mr. Travis Beard

ear Mr. Beard:

The WS-3000/WS-4000 Rotor has been tested in our invironmental chamber to -20 degrees F. No degradation of peration was experienced at low test. Due to the size imitation of the environmental chamber, these tests were performed without a speaker assembly mounted on the rotor. We do not feel that this should be a matter for consideration, due to the fact that the gear train does not operate submerged in lubrication. Because of this, the only component of the rotor that could be affected by extreme low temperature is the 24 volts D.C. motor.

In regards to your questions on the wind tunnel testing, the complete unit (speaker and rotor) was tested to be capable of withstanding wind loads of up to 143 MPH. The results given in the report of the rotating capabilities of the unit are somewhat misleading. On the five test runs that rotation was attempted, the unit stalled at between 80 MPH and 90 MPH. Because the unit failed to rotate at the maximum wind velocity (143 mph) of each test, the test results state that the unit failed all five tests. However, we would like to point out that the unit that was tested had a total torque output of 100 foot-pounds. After the conclusion of this testing we upgraded the torque output to around 550 foot-pounds of torque. The increase in torque output gives the rotor the capability to rotate in wind velocities of up to 120 MPH.

The wind tunnel testing and subsequent upgrading of torque was done for and by the request of Florida Power and Light Company. The increase in torque was verified by Florida Power and Light personnel at our plant site.

If you have the need for further verification of the testing and upgrading of the rotor, we suggest that you contact them.

I hope the above information is helpful in the clarification of this matter. If I can be of any further assistance to you. please do not hesitate to contact me directly.

Respectfully.

Charles Phelps Vice President

CP/TLB/LVR

ROUTE 145, WINTHROP RD., CHESTER, CONNECTICUT, U.S.A. 06412-0684 TELEPHONE: (203) 526-9504/TWX: 710-428-8423