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United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

References: (a) Facility Operating License NPF-56, Construction Permit
CPPR-136, Pocket Nos. 50-443 and 50-444

Subject: Magnetic Tape of Validated Meteorological Data for Seabrook Station

Gentlemen:

Enclosed please find a magnetic data tape containing available validated meteorological data taken from onsite meteorological instrumentation at Seabrook Station. This information is being provided to the NRC Staff for their information and use.

The enclosed tape provides two files containing data for the periods of 4/1/79 through 12/31/83 and 10/1/86 through 6/30/87. The enclosed Appendix provides further details on tape format, data format and available meteorological parameters. The tape format was developed using the recommended format for transmitting onsite meteorological data as described in Section 2.3.3 of Appendix A of Standard Review Plan (NUREG-0800).

New Hampshire Yankee trusts that this information will assist in your understanding the meteorological characteristics of the Seabrook Station site. Should the Staff require additional copies of this tape, do not hesitate to contact Mr. R. E. Sweeney at (301) 656-6100.

Very truly yours,

George S. Thomas
George S. Thomas

Enclosure

8804070051 880401
PDR ADOCK 05000443
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FE25
1/1
TAPE TO
W. MEINKE

APPENDIX

TAPE CHARACTERISTICS AND DATA FORMAT
FOR SEABROOK STATION METEOROLOGICAL DATA TAPES

Tape Format:

Nine track, EBCDIC, Standard label, Record Length = 160,
Block size = 3200, Density = 1600 BPI

Data Format:

The tape data format is intended to follow the NRC recommended format outlined in Appendix A of Standard Review Plan Section 2.3.3 (Onsite Meteorological Measurement Programs). Note that all measurements were made in English Units (e.g., wind speed in mph, temperature/dew point in deg F, temp. diff. in deg F/delta-height, and precipitation in inches) and were converted to Metric Units for the purpose of creating the tapes.

Each tape contains two files: the first file contains meteorological data for the period 04/01/79 through 12/31/83 and the second contains data for the period 10/01/86 through 06/30/87.

The first five records of each file contain a tape description, including plant name, location (latitude, longitude), dates of data, and heights of measurements. The format for these five records is 160A1. The remaining records in each file contain the meteorological data in format (I6,I2,I3,I4,25F5.1,F5.2,3F5.1). A description of the meteorological data format is provided in Exhibit A. All data is provided to the tenth of a unit, except solar radiation which is given to a hundredth of a unit. Note that all nines in a field (99999) indicates a lost record and all sevens in a wind direction field (77777) indicates calm (wind speeds less than 0.5 mph).

Listings of the first 20 records in each of the two files are provided in Exhibits B and C.

EXHIBIT A
(Sheet 1 of 2)

RECORD FORMAT

| <u>Column</u> | <u>Format</u> | <u>Description</u> |
|---------------|---------------|---|
| 001-006 | I6 | Identifier (999999) |
| 007-008 | I2 | Year |
| 009-011 | I3 | Julian Day |
| 012-015 | I4 | Hour (24-hour clock, 00:00-23:00) |
| 016-020 | F5.1 | Upper Measurement Level (63.7 meters) |
| 021-025 | F5.1 | Wind Direction (degrees) |
| 026-030 | F5.1 | Wind Speed (meter/sec) |
| 031-035 | F5.1 | Sigma Theta (degrees) |
| 036-040 | F5.1 | Ambient Temperature (Not Available) |
| 041-045 | F5.1 | Moisture (Not Available) |
| 046-050 | F5.1 | Other (Not Used) |
| 051-055 | F5.1 | Intermediate Measurement Level (45.7 meters) |
| 056-060 | F5.1 | Wind Direction (Not Available) |
| 061-065 | F5.1 | Wind Speed (Not Available) |
| 066-070 | F5.1 | Sigma Theta (Not Available) |
| 071-075 | F5.1 | Ambient Temperature (Not Available) |
| 076-080 | F5.1 | Moisture (Not Available) |
| 081-085 | F5.1 | Other (Not Used) |

Exhibit A
(Sheet 2 of 2)

| <u>Columns</u> | <u>Format</u> | <u>Description</u> |
|----------------|---------------|--|
| 086-090 | F5.1 | Lower Measurement Level (13.1 meters) |
| 091-095 | F5.1 | Wind Direction (degrees) |
| 096-100 | F5.1 | Wind Speed (meters/sec) |
| 101-105 | F5.1 | Sigma Theta (degrees) |
| 106-110 | F5.1 | Ambient Temperature (deg C) |
| 111-115 | F5.1 | Dew Point (deg C) |
| 116-120 | F5.1 | Other (Not Available) |
| 121-125 | F5.1 | Temp. Diff. (Upper-Lower) (deg C/100 meters) |
| 126-130 | F5.1 | Temp. Diff (Upper-Intermediate) (Not Available) |
| 131-135 | F5.1 | Temp. Diff. (Intermediate-Lower) (deg C/100 meters) |
| 136-140 | F5.1 | Precipitation (mm) |
| 141-145 | F5.2 | Solar Radiation (langley/min) |
| 146-150 | F5.1 | Visibility (Not Available) |
| 151-155 | F5.1 | Other (Not Used) |
| 156-160 | F5.1 | Other (Not Used) |

EXHIBIT C

Listing of the First 20 Records in File #2

METEOROLOGICAL DATA FROM SEABROOK STATION, SEABROOK, NH
 PLANT LOCATION: 70 DEG, 51 MIN, 05 SEC WEST LONGITUDE: 42 DEG, 53 MIN, 53 SEC NORTH LATITUDE
 PERIOD OF RECORD: 10/01/86 THROUGH 06/30/87
 MEASUREMENT HEIGHTS: UPPER LEVEL - 209 FEET, MIDDLE LEVEL - 150 FEET, LOWER LEVEL - 43 FEET
 FOR ANY QUESTIONS, CONTACT RB HARVEY, YANKEE ATOMIC ELECTRIC CO., (617) 872-8100, Y2627

| | | | | | | | | | | | | | | | |
|-------------|------|-----|------|-----|-----|-----|-----|------|----|-----|-----|-----|-----|-----|---|
| 99999986274 | 0 | 637 | 2340 | 61 | 80 | 457 | 131 | 2290 | 38 | 90 | 233 | 203 | -5 | -5 | 0 |
| 99999986274 | 100 | 637 | 2400 | 68 | 60 | 457 | 131 | 2370 | 46 | 80 | 236 | 203 | -7 | -5 | 0 |
| 99999986274 | 200 | 637 | 2460 | 81 | 60 | 457 | 131 | 2410 | 53 | 80 | 236 | 202 | -5 | -5 | 0 |
| 99999986274 | 300 | 637 | 2510 | 71 | 60 | 457 | 131 | 2470 | 44 | 90 | 237 | 198 | -4 | -3 | 0 |
| 99999986274 | 400 | 637 | 2500 | 62 | 70 | 457 | 131 | 2470 | 35 | 110 | 231 | 194 | -3 | -3 | 0 |
| 99999986274 | 500 | 637 | 2590 | 71 | 50 | 457 | 131 | 2540 | 42 | 70 | 229 | 191 | -3 | -3 | 0 |
| 99999986274 | 600 | 637 | 3120 | 86 | 80 | 457 | 131 | 3090 | 63 | 110 | 219 | 163 | -11 | -10 | 0 |
| 99999986274 | 700 | 637 | 3100 | 88 | 80 | 457 | 131 | 3050 | 65 | 110 | 212 | 146 | -14 | -15 | 0 |
| 99999986274 | 800 | 637 | 3150 | 90 | 90 | 457 | 131 | 3150 | 71 | 110 | 212 | 133 | -16 | -15 | 0 |
| 99999986274 | 900 | 637 | 3060 | 104 | 60 | 457 | 131 | 3040 | 77 | 100 | 214 | 132 | -18 | -19 | 0 |
| 99999986274 | 1000 | 637 | 3000 | 77 | 100 | 457 | 127 | 3020 | 57 | 130 | 218 | 117 | -19 | -20 | 0 |
| 99999986274 | 1100 | 637 | 3270 | 72 | 100 | 457 | 131 | 3270 | 56 | 130 | 220 | 103 | -18 | -19 | 0 |
| 99999986274 | 1200 | 637 | 3300 | 86 | 80 | 457 | 131 | 3290 | 67 | 120 | 219 | 92 | -16 | -17 | 0 |
| 99999986274 | 1300 | 637 | 3170 | 76 | 70 | 457 | 131 | 3140 | 59 | 110 | 217 | 92 | -14 | -15 | 0 |