PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4502

JOHN S. KEMPER
VICE-PRESIDENT
ENGINEERING AND RESEARCH

NOV 14 1984

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Limerick Generating Station, Units 1 and 2
Meteorological Monitoring System

REFERENCE:
1) Letter from J. S. Kemper to A. Schwencer, dated October 13, 1984
2) Letter from J. S. Kemper to A. Schwencer, dated February 27, 1984, Tape Submittal for Data Collection Period October 15, 1983 to January 15, 1984
3) Letter from J. S. Kemper to A. Schwencer, dated May 15, 1984, Tape Submittal for Data Collection Period October 15, 1983 to April 15, 1984
4) Letter from J. S. Kemper to A. Schwencer, dated August 15, 1984, Tape Submittal for Data Collection Period April 16, 1984 to July 15, 1984
5) Telepone Conference Call Between A. J. Marie, R. J. Stipcevich (PECo) and E. Markee (NRC), on October 12, 1984, Discussion of LGS Meteorological System Data Recovery Rates

FILE: GOVT 1-1 (NRC)

Dear Mr. Schwencer:

In accordance with the reference (1) letter, we are enclosing a magnetic tape containing hour-by-hour meteorological data for the period of July 16, 1984 to October 14, 1984. The data included and tape formats are described on the attached pages.

The reference (5) conference call was held to discuss the criteria the NRC staff would use in assessing meteorological data recovery rates at Limerick Generating Station. It was agreed that until enough data is collected from the new meteorological system showing hour by hour comparisons between towers, the NRC staff would review the primary tower only, without substitution from the back-up tower.

Rec'd w/out Tape

50-352
50-353

Original To: Reg Files IE25 1/1

Prior to this discussion substituted data from the back-up tower was used for the primary tower delta-temperature (266 minus 26 foot elevations) for the period April 24 to July 9, 1984. Since the data lost during this period was due to one long system outage caused by hardware problems, which have since been corrected by the meteorological equipment manufacturer, it was agreed that this period of data would be excluded from the data recovery calculations. Therefore, the revised joint data recovery rates of the delta-temperature (266 minus 26 foot elevations) and each of the three elevations of wind sensors for the period October 15, 1983 to October 14, 1984 (excluding the period of substituted data) were: 97.4% for the 270-ft. level, 97.1% for the 175-ft level, and 97.2% for the 30-ft. level. The joint data recoveries for the period of July 16, 1984 to October 14, 1984 (data on enclosed tape) without substitutions were: 98% for the 270-ft. level, 97.4% for the 175-ft level and 98.2% for the 30-ft. level. These values were calculated utilizing the NRC JFREQ program.

Sincerely,

John S Kemper

JRE/dg/11088403

Enclosure

Copy to: (See Attached Service List)

cc: Judge Helen F. Hoyt (w/o enclosure)
Judge Jerry Harbour (w/o enclosure)
Judge Richard F. Cole (w/o enclosure)
Judge Christine N. Kohl (w/o enclosure)
Judge Gary J. Edles (w/o enclosure)
Judge Reginald L. Gotchy (w/o enclosure)
Troy B. Conner, Jr., Esq. (w/o enclosure)
Ann P. Hodgdon, Esq. (w/o enclosure)
Mr. Frank R. Romano (w/o enclosure)
Mr. Robert L. Anthony (w/o enclosure)
Ms. Phyllis Zitzer (w/o enclosure)
Charles W. Elliot, Esq. (w/o enclosure)
Zori G. Ferkin, Esq. (w/o enclosure)
Mr. Thomas Gerusky (w/o enclosure)
Director, Penna. Emergency Management Agency (w/o enclosure)
Angus R. Love, Esq. (w/o enclosure)
David Wersan, Esq. (w/o enclosure)
Robert J. Sugarman, Esq. (w/o enclosure)
Martha W. Bush, Esq. (w/o enclosure)
Spence W. Perry, Esq. (w/o enclosure)
Jay M. Gutierrez, Esq. (w/o enclosure)
Atomic Safety & Licensing Appeal Board (w/o enclosure)
Atomic Safety & Licensing Board Panel (w/o enclosure)
Docket & Service Section (w/o enclosure)
Mr. James Wiggins (w/o enclosure)
Mr. Timothy R. S. Campbell (w/o enclosure)

Table 1
Limerick Generating Station
Meteorological Tower 1 Data
NRC Tape Format
7/16/84 - 10/14/84

Data Description	Format	Columns
ID Number (300021)	I6	1-6
Year	I2	7-8
Julian Day	I3	9-11
Hour	I4	12-15
Upper Wind Height (m x 10) (823)	I5	16-20
270-Ft. Wind Direction (°Az x 10)	I5	21-25
270-Ft. Wind Speed (m/sec x 10)	I5	26-30
Turbulence Class*	I5	31-35
Spaces	15X	36-50
Intermediate Wind Height (m x 10) (533)	I5	51-55
175-Ft. Wind Direction (°Az x 10)	I5	56-60
175-Ft. Wind Speed (m/sec x 10)	I5	61-65
175-Ft. Sigma Theta (degrees x 10)	I5	66-70
Spaces	15X	71-85
Lower Wind Height (m x 10) (91)	I5	86-90
30-Ft. Wind Direction (°Az x 10)	I5	91-95
30-Ft. Wind Speed (m/sec x 10)	I5	96-100
30-Ft. Sigma Theta (degrees x 10)	I5	101-105
26-Ft. Ambient Temperature (°C x 10)	I5	106-110
Dew Point Temperature (°C x 10)	I5	111-115
Spaces	5X	116-120
266-26 Ft. Delta Temperature (°C/100 m x 10)	I5	121-125
Spaces	5X	126-130
171-26 Ft. Delta Temperature (°C/100 m x 10)	I5	131-135
Precipitation (mm x 10)	I5	136-140
Satellite Wind Height (m x 10) (98)	I5	141-145
Satellite Wind Direction (°Az x 10)	I5	146-150
Satellite Wind Speed (m/sec x 10)	I5	151-155
Satellite Sigma Theta (degrees x 10)	I5	156-160

* Turbulence Classification System (Gustiness)

1 = Very Unstable
2 = Slightly Unstable
3 = Moderately Unstable
4 = Neutral
5 = Stable