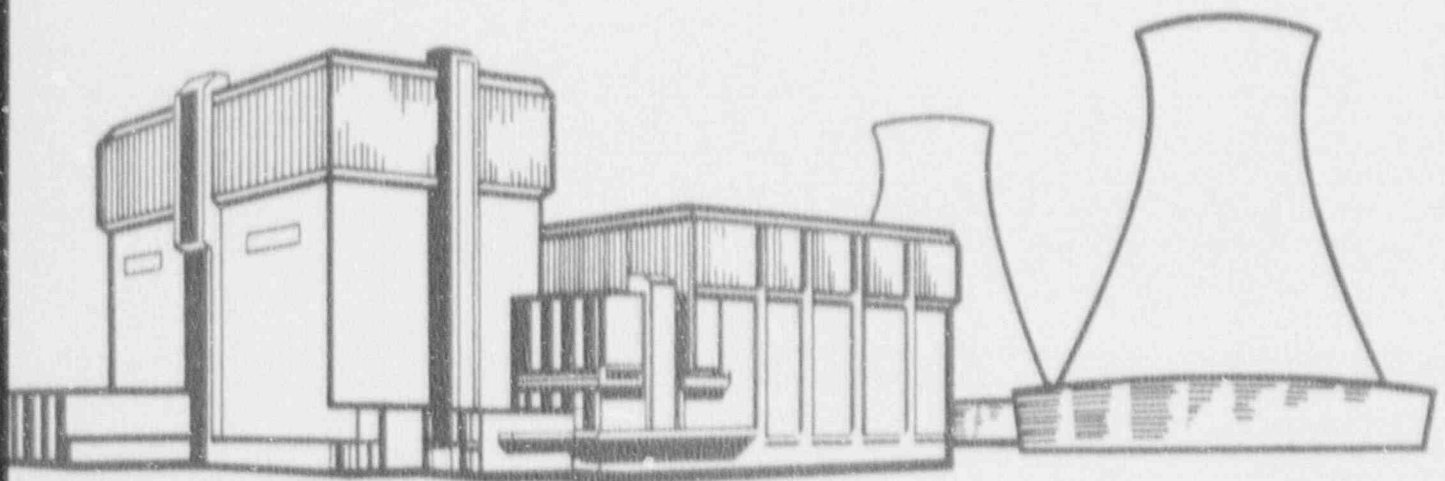


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LIMERICK GENERATING STATION

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PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION


DOCKET NO. 50-352 (Unit 1)

DOCKET NO. 50-353 (Unit 2)

Tower No. 1
Joint Frequency Distributions of
Wind Speed and Direction by
Atmospheric Stability Class
1990
Report No. 6

Submitted to
The United States Regulatory Commission
Pursuant to
Facility Operating License NPF-39 (Unit 1)
and NPF-85 (Unit 2)

Preparation Directed by:
G. M. Leitch, Vice President
Limerick Generating Station



J. Doering, Jr. Plant Manager

INTRODUCTION

This report is an attachment to the Semi-Annual Effluent Release Report No. 13, July 1, 1990 through December 31, 1990, for Limerick Generating Station Unit 1 and Unit 2.

In accordance with LGS Technical Specification 6.9.1.8, the distributions include all three wind levels from Limerick Meteorological Tower No. 1. The distributions were developed on the Radiation and Meteorological Monitoring System - RM-21A system. Each of these "wind roses" consists of eight pages of joint frequency distributions. There is one distribution for each of the seven Pasquill-Gifford stability classes, A through G, and a combined "all Classes" page. The Pasquill-Gifford stability classes are determined by the temperature differences measured over the 266-26 feet and the 171-26 feet height intervals. All meteorological data was finalized on the RM-21A system. NRC format data tapes covering the periods January 1990 through June 1990 and July 1990 through December 1990 are currently retained on site.

JOINT DISTRIBUTION OF
WIND DIRECTION AND SPEED DATA
JANUARY - JUNE 1990

LIMERICK GENERATING STATION

DIGLAPSE VERSION 1.0

LAPSE RATE WIND ROSE PROGRAM TO COMPUTE
JOINT FREQUENCY DISTRIBUTIONS OF WIND DIRECTION
AND SPEED BY ATMOSPHERIC STABILITY CLASS

DIGLAPSE ALSO COMPUTES THE JOINT DATA RECOVERY RATE AS REQUIRED BY REGULATORY GUIDE 1.23. FOR BOTH THE JOINT FREQUENCY DISTRIBUTION AND DATA RECOVERY CALCULATIONS BOTH THE PRIMARY AND BACKUP SENSORS SPECIFIED IN TABLE 3.3.7.3-1 OF THE LOS TECH SPECS ARE USED.

THE PRIMARY AND BACKUP SENSORS USED IN THE ATTACHED DISTRIBUTIONS ARE AS FOLLOWS:

<u>PARAMETER</u>	<u>TOWER 1</u> (PRIMARY)		<u>TOWER 2</u> (BACKUP)
WIND SPEED			
LEVEL 1	30 FT.	OR	159 FT.
LEVEL 2	175 FT.	OR	304 FT.
WIND DIRECTION			
LEVEL 1	30 FT.	OR	159 FT.
LEVEL 2	175 FT.	OR	304 FT.
DELTA TEMPERATURE			
LEVELS 1 & 2	266-26 FT.	OR	300-26 FT.

PERICK NET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 1
DELTA T: (266-26FT)

LAPSE RATE: LE = 1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-2.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
E	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	2	0.0
S	0	0.0	0	0.0	2	0.0	6	0.1	0	0.0	0	0.0	0	0.0	8	0.2
SSW	0	0.0	0	0.0	3	0.1	16	0.4	0	0.0	0	0.0	0	0.0	19	0.4
SW	0	0.0	0	0.0	3	0.1	2	0.0	0	0.0	0	0.0	0	0.0	5	0.1
WSW	0	0.0	0	0.0	6	0.1	3	0.1	0	0.0	0	0.0	0	0.0	9	0.2
W	0	0.0	0	0.0	1	0.0	1	0.0	4	0.1	0	0.0	0	0.0	6	0.1
WNW	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
NW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	16	0.4	32	0.7	4	0.1	0	0.0	0	0.0	52	1.2

AN WIND SPEED: 9.0
SSING: 0

LINCOLN NET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED

BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 2

DELTA T: (266-26FT)

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-16.5		16.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	0	0.0	0	0.0	4	0.1	3	0.1	0	0.0	0	0.0	7	0.2
SSW	0	0.0	0	0.0	0	0.0	5	0.1	15	0.3	0	0.0	0	0.0	18	0.4
SW	0	0.0	0	0.0	4	0.1	3	0.1	2	0.0	0	0.0	0	0.0	9	0.2
WSW	0	0.0	0	0.0	1	0.0	4	0.1	1	0.0	0	0.0	0	0.0	6	0.1
W	0	0.0	0	0.0	2	0.0	1	0.0	0	0.0	3	0.1	0	0.0	6	0.1
WNW	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	2	0.0	0	0.0	4	0.1
NW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	8	0.2	20	0.5	19	0.4	5	0.1	0	0.0	52	1.2

MEAN WIND SPEED: 12.3

MISSING: 0

AMERICK NET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: -1.6 TO +1.7 DEG C/100M
 CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
E	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	0	0.0	2	0.0	2	0.0	0	0.0	0	0.0	4	0.1
SE	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
SSE	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	2	0.0
S	0	0.0	2	0.0	0	0.0	7	0.2	3	0.1	1	0.0	0	0.0	13	0.3
SSW	0	0.0	1	0.0	2	0.0	6	0.2	12	0.3	0	0.0	0	0.0	23	0.5
SW	0	0.0	0	0.0	4	0.1	2	0.0	1	0.0	0	0.0	0	0.0	7	0.2
WSW	0	0.0	2	0.0	1	0.0	5	0.1	1	0.0	0	0.0	0	0.0	9	0.2
W	0	0.0	0	0.0	3	0.1	14	0.3	6	0.2	5	0.1	1	0.0	31	0.7
WNW	0	0.0	0	0.0	2	0.0	9	0.2	5	0.1	4	0.1	0	0.0	20	0.5
NW	0	0.0	0	0.0	1	0.0	6	0.1	7	0.2	0	0.0	0	0.0	14	0.3
NNW	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
	0	0.0	5	0.1	16	0.4	57	1.3	39	0.9	10	0.2	1	0.0	130	3.0

MEAN WIND SPEED: 12.0

MISSING: 0

LIMERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 2
DELTA T: (266-26FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

DIRECTION	WIND SPEED GROUPS (MPH)														SUM PERCENT			
	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6					
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT					
N	0	0.0	0	0.0	1	0.0	0	0.1	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
NNE	0	0.0	0	0.0	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
NE	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
ENE	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
E	0	0.0	0	0.0	1	0.0	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	7	0.2
ESE	0	0.0	0	0.0	2	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
SE	0	0.0	0	0.0	3	0.1	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	8	0.2
SSE	0	0.0	0	0.0	2	0.0	6	0.1	4	0.1	0	0.0	0	0.0	0	0.0	12	0.3
S	0	0.0	4	0.1	0	0.0	7	0.2	5	0.1	1	0.0	0	0.0	0	0.0	17	0.4
SSW	0	0.0	1	0.0	2	0.0	10	0.2	5	0.1	2	0.0	0	0.0	0	0.0	20	0.5
SW	0	0.0	3	0.1	4	0.1	8	0.2	4	0.1	0	0.0	0	0.0	0	0.0	19	0.4
WSW	0	0.0	0	0.0	7	0.2	8	0.2	3	0.1	0	0.0	0	0.0	0	0.0	18	0.4
W	0	0.0	0	0.0	5	0.1	23	0.5	11	0.3	4	0.1	1	0.0	0	0.0	44	1.0
WNW	0	0.0	0	0.0	1	0.0	21	0.5	23	0.5	8	0.2	3	0.1	0	0.0	56	1.3
NW	0	0.0	0	0.0	4	0.1	17	0.4	16	0.4	3	0.1	1	0.0	0	0.0	41	0.9
NNW	0	0.0	0	0.0	2	0.0	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	7	0.2
	0	0.0	8	0.2	41	0.9	125	2.9	72	1.7	18	0.4	5	0.1	269	6.2		

MEAN WIND SPEED: 11.7

MISSING: 0

PERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
 CLASS D

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	U	U.V	U	U.V	U	U.V	U	U.V	U	U.V	U	U.V	U	U.V	U	U.V
N	0	0.0	2	0.0	25	0.5	56	1.3	14	0.4	3	0.1	0	0.0	100	2.2
NNE	0	0.0	4	0.1	20	0.5	33	0.8	8	0.2	0	0.0	0	0.0	65	1.5
NE	0	0.0	6	0.1	44	1.0	25	0.6	1	0.0	0	0.0	0	0.0	76	1.7
ENE	0	0.0	10	0.2	45	1.0	42	1.0	6	0.1	0	0.0	0	0.0	103	2.4
E	0	0.0	22	0.5	35	0.8	52	1.2	50	1.2	0	0.0	0	0.0	159	3.7
ESE	0	0.0	16	0.4	19	0.4	24	0.6	9	0.2	0	0.0	0	0.0	68	1.6
SE	0	0.0	11	0.3	13	0.3	22	0.5	3	0.1	0	0.0	0	0.0	49	1.1
SSE	0	0.0	13	0.3	18	0.4	22	0.5	12	0.3	2	0.0	0	0.0	67	1.5
S	0	0.0	18	0.4	36	0.8	58	1.3	19	0.4	2	0.0	0	0.0	133	3.1
SSW	0	0.0	18	0.4	37	0.9	67	1.5	39	0.9	10	0.2	3	0.1	174	4.0
SW	0	0.0	15	0.3	38	0.9	31	0.7	18	0.4	1	0.0	0	0.0	103	2.4
WSW	0	0.0	12	0.3	21	0.5	24	0.6	19	0.4	1	0.0	0	0.0	77	1.8
W	0	0.0	18	0.4	29	0.7	44	1.0	42	1.0	21	0.5	6	0.1	160	3.7
WNW	0	0.0	8	0.2	35	0.8	85	2.0	97	2.2	74	1.7	12	0.3	311	7.2
NW	0	0.0	4	0.1	31	0.7	64	1.5	106	2.4	30	0.7	8	0.2	243	5.6
NNW	0	0.0	5	0.1	10	0.2	40	0.9	32	0.7	7	0.2	0	0.0	94	2.2
	0	0.0	182	4.2	454	10.5	689	15.9	477	11.0	151	3.5	29	0.7	1982	45.6

MEAN WIND SPEED: 10.7
 MISSING: 0

CHERICK NET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 2
A T: (266-26FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	2	0.0	11	0.3	5	0.1	0	0.0	0	0.0	0	0.0	18	0.4
NNE	0	0.0	5	0.1	15	0.3	7	0.2	0	0.0	0	0.0	0	0.0	27	0.6
NE	0	0.0	5	0.1	19	0.4	7	0.2	1	0.0	0	0.0	0	0.0	32	0.7
ENE	0	0.0	6	0.1	19	0.4	13	0.3	0	0.0	0	0.0	0	0.0	38	0.9
E	0	0.0	9	0.2	15	0.3	9	0.2	2	0.0	0	0.0	0	0.0	35	0.8
ESE	0	0.0	5	0.1	18	0.4	6	0.1	1	0.0	0	0.0	0	0.0	30	0.7
SE	0	0.0	11	0.3	19	0.4	11	0.3	0	0.0	0	0.0	0	0.0	41	0.9
SSE	0	0.0	6	0.1	41	0.9	34	0.8	2	0.0	0	0.0	0	0.0	83	1.9
S	0	0.0	18	0.4	54	1.2	82	1.9	47	1.1	4	0.1	0	0.0	205	4.7
SSW	0	0.0	16	0.4	50	1.2	74	1.7	31	0.7	5	0.1	1	0.0	177	4.1
SW	0	0.0	16	0.4	57	1.3	49	1.1	6	0.1	2	0.0	0	0.0	130	3.0
WSW	0	0.0	10	0.2	56	1.3	36	0.8	10	0.2	0	0.0	0	0.0	112	2.6
W	0	0.0	13	0.3	74	1.7	57	1.3	16	0.3	0	0.0	0	0.0	156	3.5
WNW	0	0.0	13	0.3	41	0.9	70	1.6	17	0.4	3	0.1	1	0.0	145	3.3
NW	0	0.0	3	0.1	21	0.5	29	0.7	24	0.6	4	0.1	0	0.0	81	1.9
NNW	0	0.0	4	0.1	23	0.5	21	0.5	5	0.1	0	0.0	0	0.0	53	1.2
	0	0.0	142	3.3	511	11.8	506	11.6	160	3.7	18	0.4	2	0.0	1339	30.8

MEAN WIND SPEED: 8.2
MISSING: 0

MURKICK M61 DATA 1/70 - 6/70

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS:
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
 CLASS F

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
N	0	0.0	1	0.0	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	6	0.1
NNE	0	0.0	2	0.0	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0	5	0.1
NE	0	0.0	1	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
ENE	0	0.0	3	0.1	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	8	0.2
E	0	0.0	3	0.1	5	0.1	1	0.0	0	0.0	0	0.0	0	0.0	9	0.2
ESE	0	0.0	3	0.0	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	8	0.2
SE	0	0.0	9	0.2	6	0.1	3	0.0	0	0.0	0	0.0	0	0.0	15	0.3
SSE	0	0.0	9	0.2	5	0.1	5	0.1	0	0.0	0	0.0	0	0.0	19	0.4
S	0	0.0	9	0.2	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	14	0.3
SSW	0	0.0	16	0.4	5	0.1	4	0.1	2	0.0	0	0.0	0	0.0	27	0.6
SW	0	0.0	22	0.5	16	0.4	13	0.3	0	0.0	0	0.0	0	0.0	51	1.2
WSW	0	0.0	19	0.4	24	0.6	8	0.2	0	0.0	0	0.0	0	0.0	51	1.2
W	0	0.0	16	0.4	24	0.6	13	0.3	0	0.0	0	0.0	0	0.0	53	1.2
WNW	0	0.0	8	0.2	36	0.8	29	0.7	0	0.0	0	0.0	0	0.0	73	1.7
NW	0	0.0	3	0.1	13	0.3	3	0.1	2	0.0	0	0.0	0	0.0	21	0.5
NNW	0	0.0	2	0.0	4	0.1	2	0.0	0	0.0	0	0.0	0	0.0	8	0.2
	0	0.0	125	2.9	160	3.7	83	1.9	4	0.1	0	0.0	0	0.0	372	8.6

MEAN WIND SPEED: 5.3
 MISSING: 0

LIMERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: GT 4.0 DEG C/100M
 CLASS 0

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NNE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
NE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ENE	0	0.0	2	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
E	0	0.0	1	0.0	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1
ESE	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
SE	0	0.0	9	0.2	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
SSE	0	0.0	6	0.1	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	9	0.2
S	0	0.0	11	0.3	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	15	0.3
SSW	0	0.0	18	0.4	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	23	0.5
SW	0	0.0	11	0.3	7	0.2	0	0.0	0	0.0	0	0.0	0	0.0	18	0.4
WSW	0	0.0	10	0.2	4	0.1	2	0.0	0	0.0	0	0.0	0	0.0	16	0.4
W	0	0.0	11	0.3	14	0.3	3	0.1	0	0.0	0	0.0	0	0.0	28	0.6
WNW	0	0.0	8	0.2	24	0.6	10	0.3	5	0.1	0	0.0	0	0.0	47	1.1
NW	0	0.0	4	0.1	7	0.2	1	0.0	0	0.0	0	0.0	0	0.0	12	0.3
NNW	0	0.0	2	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
	0	0.0	94	2.2	84	1.9	17	0.4	5	0.1	0	0.0	0	0.0	200	4.6

MEAN WIND SPEED: 4.3

MISSING: 0

PERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
N	0	0.0	0	0.1	39	0.9	67	1.5	16	0.4	3	0.1	0	0.0	131	3.0
NNE	0	0.0	11	0.3	40	0.9	42	1.0	8	0.2	0	0.0	0	0.0	101	2.3
NE	0	0.0	12	0.3	66	1.5	34	0.8	2	0.0	0	0.0	0	0.0	114	2.6
ENE	0	0.0	21	0.5	72	1.7	57	1.3	6	0.1	0	0.0	0	0.0	156	3.6
E	0	0.0	35	0.8	61	1.4	69	1.6	52	1.2	0	0.0	0	0.0	217	5.0
ESE	0	0.0	23	0.5	48	1.1	37	0.9	12	0.3	0	0.0	0	0.0	120	2.8
SE	0	0.0	40	0.9	45	1.0	39	0.9	3	0.1	0	0.0	0	0.0	127	2.9
SSE	0	0.0	34	0.8	69	1.6	70	1.6	18	0.4	2	0.0	0	0.0	193	4.4
S	0	0.0	42	1.0	99	2.3	100	2.3	77	1.8	0	0.0	0	0.0	404	9.3
SSW	0	0.0	70	1.6	101	2.3	168	3.9	102	2.3	17	0.4	4	0.1	462	10.6
SW	0	0.0	67	1.5	132	3.0	106	2.4	31	0.7	3	0.1	0	0.0	339	7.8
WSW	0	0.0	53	1.2	114	2.6	87	2.0	34	0.8	1	0.0	0	0.0	289	6.7
W	0	0.0	58	1.3	131	3.0	151	3.5	75	1.7	33	0.8	8	0.2	456	10.5
WNW	8	0.2	89	2.0	148	3.3	238	5.3	149	3.4	81	2.1	14	0.4	684	15.1
NW	0	0.0	14	0.3	77	1.8	120	2.8	155	3.6	77	0.9	9	0.2	412	9.5
NNW	8	0.2	18	0.4	42	1.0	67	1.5	38	0.9	7	0.2	0	0.0	167	3.8
	0	0.0	556	12.8	1276	29.4	1497	34.5	776	17.9	202	4.7	37	0.9	4344	100.0

MISSING HOURS: 0

AVG WIND SPEED: 9.3

LINERICH MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS:
 WIND: LEVEL 2
 DELTA T: (266-26FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		5.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	6	0.1	39	0.9	67	1.5	16	0.4	3	0.1	0	0.0	131	3.0
NNE	0	0.0	11	0.3	40	0.9	42	1.0	8	0.2	0	0.0	0	0.0	101	2.3
NE	0	0.0	12	0.3	66	1.5	34	0.8	2	0.0	0	0.0	0	0.0	114	2.6
ENE	0	0.0	21	0.5	72	1.7	57	1.3	6	0.1	0	0.0	0	0.0	156	3.6
E	0	0.0	35	0.8	61	1.4	69	1.6	52	1.2	0	0.0	0	0.0	217	5.0
ESE	0	0.0	23	0.5	48	1.1	37	0.9	12	0.3	0	0.0	0	0.0	120	2.8
SE	0	0.0	40	0.9	45	1.0	39	0.9	3	0.1	0	0.0	0	0.0	127	2.9
SSE	0	0.0	34	0.8	69	1.6	70	1.6	18	0.4	2	0.0	0	0.0	193	4.4
S	0	0.0	62	1.4	99	2.3	156	3.6	77	1.8	8	0.2	0	0.0	404	9.3
SSV	0	0.0	70	1.6	101	2.3	166	3.9	102	2.3	17	0.4	4	0.1	462	10.6
SV	0	0.0	67	1.5	132	3.0	106	2.4	31	0.7	3	0.1	0	0.0	339	7.8
VSV	0	0.0	53	1.2	114	2.6	87	2.0	34	0.8	1	0.0	0	0.0	289	6.7
V	0	0.0	58	1.3	151	3.0	151	3.5	75	1.7	33	0.8	8	0.2	456	10.5
VNV	0	0.0	37	0.9	140	3.2	225	5.2	147	3.4	91	2.1	16	0.4	656	15.1
NV	0	0.0	14	0.3	77	1.8	120	2.8	155	3.6	37	0.9	9	0.2	412	9.5
NNV	0	0.0	13	0.3	42	1.0	67	1.5	38	0.9	7	0.2	0	0.0	167	3.8
	0	0.0	556	12.8	1276	29.4	1497	34.5	776	17.9	202	4.7	37	0.9	4344	100.0

MISSING HOURS: 0

MEAN WIND SPEED: 9.3

LIMERICK GENERATING STATION
DATA RECOVERY SUMMARY

LEVEL 2 - TOWER 1 175' OR TOWER 2 304'

PARAMETER	COUNT	PERCENT
PRIMARY SPEED GOOD HOURS	4338	99.86%
BACKUP SPEED GOOD HOURS	4274	98.39%
BACKUP SPEED HOURS USED	0	0.00%
TOTAL AVAILABLE SPEED HOURS	4344	100.00%
PRIMARY DIRECTION GOOD HOURS	4340	99.91%
BACKUP DIRECTION GOOD HOURS	4243	97.67%
BACKUP DIRECTION HOURS USED	4	0.09%
TOTAL AVAILABLE DIRECTION HOURS	4344	100.00%
PRIMARY (266-26') DELTA TEMP HOURS	4262	98.11%
BACKUP (300-26') DELTA TEMP HOURS	4197	96.62%
BACKUP DELTA TEMP HOURS USED	82	1.89%
TOTAL AVAILABLE DELTA TEMP HOURS	4344	100.00%
LEVEL 2 JOINT DATA RECOVERY:	4344	100.00%

LIMERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
 CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NF	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
FNF	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
E	0	0.0	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	4	0.1
ESE	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
SE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SSE	0	0.0	2	0.0	1	0.0	3	0.1	0	0.0	0	0.0	0	0.0	6	0.1
S	0	0.0	1	0.0	2	0.0	9	0.2	3	0.1	0	0.0	0	0.0	15	0.3
SSW	0	0.0	1	0.0	1	0.0	14	0.3	2	0.0	0	0.0	0	0.0	18	0.4
SW	0	0.0	0	0.0	7	0.2	2	0.0	0	0.0	0	0.0	0	0.0	9	0.2
VSW	0	0.0	1	0.0	6	0.1	3	0.1	1	0.0	0	0.0	0	0.0	11	0.3
W	0	0.0	1	0.0	11	0.3	12	0.3	10	0.2	0	0.0	0	0.0	34	0.8
VNW	0	0.0	0	0.0	8	0.2	10	0.2	4	0.1	0	0.0	0	0.0	24	0.6
NW	0	0.0	0	0.0	3	0.1	1	0.0	1	0.0	0	0.0	0	0.0	5	0.1
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	6	0.1	42	1.0	59	1.4	23	0.5	0	0.0	0	0.0	130	3.0

MEAN WIND SPEED: 8.8
 MISSING: 0

IMERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: +1.6 TO -1.5 DEG C/100M
 CLASS C

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT			
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	3	0.1	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1
NNE	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
NE	0	0.0	1	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
ENE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
E	0	0.0	1	0.0	1	0.0	7	0.2	0	0.0	0	0.0	0	0.0	0	0.0	9	0.2
ESE	0	0.0	0	0.0	3	0.1	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	7	0.2
SE	0	0.0	0	0.0	4	0.1	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	9	0.2
SSE	0	0.0	1	0.0	3	0.1	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	10	0.2
S	0	0.0	3	0.1	6	0.1	6	0.1	2	0.0	0	0.0	0	0.0	0	0.0	17	0.4
SSW	0	0.0	2	0.0	5	0.1	10	0.2	3	0.1	0	0.0	0	0.0	0	0.0	20	0.5
SV	0	0.0	3	0.1	5	0.1	8	0.2	0	0.0	0	0.0	0	0.0	0	0.0	16	0.4
VSW	0	0.0	4	0.1	11	0.3	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	20	0.5
W	0	0.0	0	0.0	24	0.6	19	0.4	8	0.2	0	0.0	0	0.0	0	0.0	51	1.2
WNW	0	0.0	1	0.0	13	0.3	34	0.8	14	0.3	3	0.1	0	0.0	0	0.0	65	1.5
NW	0	0.0	0	0.0	6	0.1	13	0.3	6	0.1	0	0.0	0	0.0	0	0.0	25	0.6
NNW	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
	0	0.0	16	0.4	76	2.2	120	2.8	34	0.8	3	0.1	0	0.0	0	0.0	269	6.2

MEAN WIND SPEED: 6.7
 MISSING: 0

LIMERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 1
DELTA T: (266-267°)

LAPSE RATE: -1.4 TO +0.5 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	16	0.4	47	1.1	30	0.7	2	0.0	0	0.0	0	0.0	95	2.2
NNE	0	0.0	20	0.5	41	0.9	10	0.2	0	0.0	0	0.0	0	0.0	71	1.6
NE	0	0.0	35	0.8	50	1.2	4	0.1	0	0.0	0	0.0	0	0.0	89	2.0
ENE	0	0.0	34	0.8	67	1.5	45	1.0	1	0.0	0	0.0	0	0.0	147	3.4
E	0	0.0	36	0.8	33	0.8	52	1.2	4	0.1	0	0.0	0	0.0	123	2.8
ESE	0	0.0	14	0.3	20	0.5	19	0.4	2	0.0	0	0.0	0	0.0	55	1.3
SE	0	0.0	13	0.3	26	0.6	6	0.1	0	0.0	0	0.0	0	0.0	45	1.0
SSE	0	0.0	11	0.3	36	0.8	24	0.6	3	0.1	0	0.0	0	0.0	74	1.7
S	0	0.0	24	0.6	56	1.3	36	0.8	5	0.1	0	0.0	0	0.0	121	2.8
SSW	0	0.0	27	0.6	58	1.3	58	1.3	5	0.1	2	0.0	0	0.0	150	3.5
SW	0	0.0	26	0.6	40	1.1	23	0.5	0	0.0	0	0.0	0	0.0	97	2.2
WSW	0	0.0	22	0.5	38	0.9	27	0.6	4	0.1	0	0.0	0	0.0	91	2.1
W	0	0.0	9	0.2	63	1.5	81	1.9	45	1.0	2	0.0	0	0.0	200	4.6
WSW	0	0.0	24	0.6	66	2.0	120	2.8	93	2.1	8	0.2	0	0.0	333	7.7
NW	0	0.0	12	0.3	51	1.2	103	2.4	31	0.7	2	0.0	0	0.0	199	4.6
NNW	0	0.0	8	0.2	31	0.7	45	1.0	8	0.2	0	0.0	0	0.0	92	2.1
	0	0.0	329	7.6	753	17.3	683	15.7	203	4.7	16	0.3	0	0.0	1982	45.6

MEAN WIND SPEED: 7.5
MISSING: 0

LIMERICK MEY DATA 1/00 - 4/00

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS:
 WIND: LEVEL 1
 DELTA T: (066 067T)

LAPSE RATE: 0.4 TO 1.5 DEG C/100M
 CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
N	0	0.0	16	0.4	13	0.3	0	0.0	0	0.0	0	0.0	0	0.0	29	0.7
NNE	0	0.0	30	0.7	10	0.2	1	0.0	0	0.0	0	0.0	0	0.0	41	0.9
NE	0	0.0	34	0.8	18	0.4	0	0.0	0	0.0	0	0.0	0	0.0	52	1.2
ENE	0	0.0	31	0.7	16	0.4	2	0.0	0	0.0	0	0.0	0	0.0	49	1.1
E	0	0.0	32	0.7	18	0.4	1	0.0	0	0.0	0	0.0	0	0.0	51	1.2
ESE	0	0.0	23	0.5	26	0.6	1	0.0	0	0.0	0	0.0	0	0.0	50	1.2
SE	0	0.0	19	0.4	45	1.0	2	0.0	0	0.0	0	0.0	0	0.0	66	1.5
SSE	0	0.0	24	0.6	62	1.4	16	0.4	1	0.0	0	0.0	0	0.0	103	2.4
S	0	0.0	33	0.8	86	2.0	41	0.9	3	0.1	0	0.0	0	0.0	163	3.5
SSW	0	0.0	55	1.3	70	1.6	21	0.5	2	0.0	0	0.0	0	0.0	148	3.4
SW	0	0.0	56	1.3	58	1.3	3	0.1	1	0.0	0	0.0	0	0.0	120	2.8
WSW	0	0.0	60	1.4	42	1.0	3	0.1	0	0.0	0	0.0	0	0.0	105	2.4
W	0	0.0	53	1.2	69	1.6	12	0.3	2	0.0	0	0.0	0	0.0	136	3.1
WNW	0	0.0	29	0.7	64	1.5	14	0.3	2	0.0	0	0.0	0	0.0	109	2.5
NW	0	0.0	35	0.8	37	0.9	18	0.4	3	0.1	0	0.0	0	0.0	93	2.1
NNW	0	0.0	13	0.3	10	0.2	1	0.0	0	0.0	0	0.0	0	0.0	24	0.6
	0	0.0	545	12.5	644	14.8	134	3.1	14	0.3	0	0.0	0	0.0	1339	30.8

MEAN WIND SPEED: 4.6
 MISSING: 0

LIMERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
 CLASS F

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	15	0.3	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	16	0.4
NNE	0	0.0	9	0.2	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
NE	0	0.0	29	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29	0.7
ENE	0	0.0	20	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	0.5
E	0	0.0	26	0.6	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	28	0.6
ESE	0	0.0	12	0.3	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	15	0.3
SE	0	0.0	7	0.2	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0	10	0.2
SSE	0	0.0	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1
S	0	0.0	10	0.2	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	12	0.3
SSW	0	0.0	21	0.5	8	0.2	1	0.0	0	0.0	0	0.0	0	0.0	30	0.7
SW	0	0.0	32	0.7	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	36	0.8
WSW	0	0.0	35	0.8	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	36	0.8
W	0	0.0	30	0.7	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	36	0.8
WNW	0	0.0	31	0.7	11	0.3	0	0.0	0	0.0	0	0.0	0	0.0	42	1.0
NW	0	0.0	25	0.6	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	31	0.7
NNW	0	0.0	13	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13	0.3
	0	0.0	321	7.4	48	1.1	3	0.1	0	0.0	0	0.0	0	0.0	372	8.6

MEAN WIND SPEED: 2.5
 MISSING: 0

IMERICK NET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 1
DELTA T: (266-26FT)

LAPSE RATE: DT 4.0 DEG C/100M
CLASS G

WIND SPEED GROUPS (MPH)

DIRECTION	0 0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	11	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	0.3
NNE	0	0.0	19	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	0.4
NE	0	0.0	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.2
ENE	0	0.0	15	0.3	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	16	0.4
E	0	0.0	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.2
ESE	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
SE	0	0.0	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
SSE	0	0.0	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1
S	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
SSW	0	0.0	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.2
SW	0	0.0	7	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	0.2
WSW	0	0.0	20	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	0.5
W	0	0.0	21	0.5	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	22	0.5
WSW	0	0.0	20	0.5	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	23	0.5
NW	0	0.0	15	0.3	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	17	0.4
NNW	0	0.0	19	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	0.4
	0	0.0	193	4.4	7	0.2	0	0.0	0	0.0	0	0.0	0	0.0	200	4.6

MEAN WIND SPEED: 2.0
MISSING: 0

TEMPERATURE DATA 1/90 - 6/90

WIND DISTRIBUTION BY WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS:

WIND: LEVEL 1
DELTA T: (266-26FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	58	1.3	64	1.5	33	0.8	2	0.0	0	0.0	0	0.0	157	3.6
NNE	0	0.0	78	1.8	58	1.3	11	0.3	0	0.0	0	0.0	0	0.0	147	3.4
NE	0	0.0	109	2.5	70	1.6	4	0.1	0	0.0	0	0.0	0	0.0	183	4.2
ENE	0	0.0	100	2.3	86	2.0	47	1.1	1	0.0	0	0.0	0	0.0	234	5.4
E	0	0.0	103	2.4	54	1.2	65	1.5	4	0.1	0	0.0	0	0.0	226	5.2
ESE	0	0.0	51	1.2	53	1.2	25	0.6	2	0.0	0	0.0	0	0.0	131	3.0
SE	0	0.0	44	1.0	78	1.8	14	0.3	0	0.0	0	0.0	0	0.0	136	3.1
SSE	0	0.0	50	1.2	102	2.3	51	1.2	4	0.1	0	0.0	0	0.0	207	4.8
S	0	0.0	74	1.7	153	3.5	99	2.3	13	0.3	0	0.0	0	0.0	339	7.8
SSW	0	0.0	116	2.7	145	3.3	120	2.8	12	0.3	2	0.0	0	0.0	395	9.1
SW	0	0.0	126	2.9	125	2.9	38	0.9	1	0.0	0	0.0	0	0.0	290	6.7
WSW	0	0.0	142	3.3	104	2.4	40	0.9	6	0.1	0	0.0	0	0.0	292	6.7
W	0	0.0	114	2.6	175	4.0	125	2.9	69	1.6	2	0.0	0	0.0	485	11.2
WNW	0	0.0	105	2.4	188	4.3	179	4.1	115	2.6	11	0.3	0	0.0	598	13.8
NW	0	0.0	87	2.0	105	2.4	135	3.1	41	0.9	2	0.0	0	0.0	370	8.5
NNW	0	0.0	53	1.2	46	1.1	47	1.1	8	0.2	0	0.0	0	0.0	154	3.5
	0	0.0	1410	33.5	1606	37.0	1033	23.8	378	8.4	17	0.4	0	0.0	4344	100.0

MISSING HOURS: 0

MEAN WIND SPEED: 6.1

HERICK MET DATA 1/90 - 6/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (244+26FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	58	1.3	64	1.5	33	0.8	2	0.0	0	0.0	0	0.0	157	3.6
NNE	0	0.0	78	1.8	58	1.3	11	0.3	0	0.0	0	0.0	0	0.0	147	3.4
NE	0	0.0	109	2.5	70	1.6	4	0.1	0	0.0	0	0.0	0	0.0	183	4.2
ENE	0	0.0	100	2.3	66	1.5	47	1.1	1	0.0	0	0.0	0	0.0	234	5.4
E	0	0.0	103	2.4	54	1.2	65	1.5	4	0.1	0	0.0	0	0.0	226	5.2
ESE	0	0.0	51	1.2	53	1.2	25	0.6	2	0.0	0	0.0	0	0.0	131	3.0
SE	0	0.0	44	1.0	78	1.8	14	0.3	0	0.0	0	0.0	0	0.0	136	3.1
SSE	0	0.0	50	1.2	102	2.3	51	1.2	4	0.1	0	0.0	0	0.0	207	4.8
S	0	0.0	74	1.7	153	3.5	99	2.3	13	0.3	0	0.0	0	0.0	339	7.8
SSW	0	0.0	116	2.7	145	3.3	120	2.8	12	0.3	2	0.0	0	0.0	395	9.1
SW	0	0.0	126	2.9	125	2.9	38	0.9	1	0.0	0	0.0	0	0.0	290	6.7
WSW	0	0.0	142	3.3	104	2.4	40	0.9	6	0.1	0	0.0	0	0.0	292	6.7
W	0	0.0	114	2.6	175	4.0	125	2.9	69	1.6	2	0.0	0	0.0	485	11.2
WNW	0	0.0	105	2.4	188	4.3	179	4.1	115	2.6	11	0.3	0	0.0	598	13.8
NW	0	0.0	87	2.0	105	2.4	135	3.1	41	0.9	2	0.0	0	0.0	370	8.5
NNW	0	0.0	53	1.2	46	1.1	47	1.1	8	0.2	0	0.0	0	0.0	154	3.5
	0	0.0	1410	32.5	1606	37.0	1033	23.8	278	6.4	17	0.4	0	0.0	4344	100.0

MISSING HOURS: 0

AN WIND SPEED: 6.1

LIMERICK GENERATING STATION
DATA RECOVERY SUMMARY

LEVEL 1 - TOWER 1 30' OR TOWER 2 159'

PARAMETER	COUNT	PERCENT
PRIMARY SPEED GOOD HOURS	4335	99.79%
BACKUP SPEED GOOD HOURS	4336	99.82%
BACKUP SPEED HOURS USED	9	0.21%
TOTAL AVAILABLE SPEED HOURS	4344	100.00%
PRIMARY DIRECTION GOOD HOURS	4335	99.82%
BACKUP DIRECTION GOOD HOURS	4339	99.88%
BACKUP DIRECTION HOURS USED	8	0.18%
TOTAL AVAILABLE DIRECTION HOURS	4344	100.00%
PRIMARY (266-26') DELTA TEMP HOURS	4262	98.11%
BACKUP (300-26') DELTA TEMP HOURS	4197	96.62%
BACKUP DELTA TEMP HOURS USED	82	1.89%
TOTAL AVAILABLE DELTA TEMP HOURS	4344	100.00%
LEVEL 1 JOINT DATA RECOVERY:	4344	100.00%

JOINT DISTRIBUTION OF
WIND DIRECTION AND SPEED DATA
JULY - DECEMBER, 1990

LIMERICK GENERATING STATION

DIGLAPSE VERSION 1.0

LAPSE RATE WIND ROSE PROGRAM TO COMPUTE
JOINT FREQUENCY DISTRIBUTIONS OF WIND DIRECTION
AND SPEED BY ATMOSPHERIC STABILITY CLASS

DIGLAPSE ALSO COMPUTES THE JOINT DATA RECOVERY RATE AS REQUIRED BY REGULATORY GUIDE 1.23. FOR BOTH THE JOINT FREQUENCY DISTRIBUTION AND DATA RECOVERY CALCULATIONS BOTH THE PRIMARY AND BACKUP SENSORS SPECIFIED IN TABLE 3.3.7.3-1 OF THE LGS TECH SPECS ARE USED.

THE PRIMARY AND BACKUP SENSORS USED IN THE ATTACHED DISTRIBUTIONS ARE AS FOLLOWS:

<u>PARAMETER</u>	<u>TOWER 1</u> (PRIMARY)		<u>TOWER 2</u> (BACKUP)
WIND SPEED			
LEVEL 1	30 FT.	OR	159 FT.
LEVEL 2	175 FT.	OR	304 FT.
WIND DIRECTION			
LEVEL 1	30 FT.	OR	159 FT.
LEVEL 2	175 FT.	OR	304 FT.
DELTA TEMPERATURE			
LEVELS 1 & 2	266-26 FT.	OR	300-26 FT.

TRICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: LE -1.9 DEG C/100M
 CLASS A

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NE	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
ENE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	2	0.0
S	0	0.0	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	4	0.1
SSW	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
SW	0	0.0	0	0.0	3	0.1	4	0.1	0	0.0	0	0.0	0	0.0	7	0.2
WSW	0	0.0	0	0.0	5	0.1	7	0.2	0	0.0	0	0.0	0	0.0	12	0.3
W	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
WNW	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
	0	0.0	0	0.0	17	0.4	19	0.4	0	0.0	0	0.0	0	0.0	36	0.8

MAX WIND SPEED: 7.4
 WIND DIRECTION: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
 CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	
N	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
NNE	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
NE	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
ENE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ESE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
S	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSW	0	0.0	0	0.0	5	0.1	1	0.0	0	0.0	0	0.0	0	0.0	6	0.1
SW	0	0.0	0	0.0	12	0.3	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
WSW	0	0.0	0	0.0	5	0.1	2	0.0	0	0.0	0	0.0	0	0.0	7	0.2
W	0	0.0	0	0.0	5	0.1	5	0.1	0	0.0	0	0.0	0	0.0	10	0.2
WNW	0	0.0	0	0.0	3	0.1	1	0.0	0	0.0	0	0.0	0	0.0	4	0.1
NW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
	0	0.0	1	0.0	38	0.9	11	0.2	0	0.0	0	0.0	0	0.0	50	1.1

MEAN WIND SPEED: 6.2
 MISSING: 0

BRICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
 CLASS C

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	0	0.0	9	0.2	1	0.0	1	0.0	0	0.0	0	0.0	11	0.2
NNE	0	0.0	0	0.0	5	0.1	2	0.0	0	0.0	0	0.0	0	0.0	7	0.2
NE	0	0.0	0	0.0	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
ENE	0	0.0	1	0.0	11	0.2	1	0.0	0	0.0	1	0.0	0	0.0	14	0.3
E	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SSE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	2	0.0	5	0.1	5	0.1	0	0.0	0	0.0	0	0.0	12	0.3
SSW	0	0.0	1	0.0	5	0.1	7	0.2	0	0.0	0	0.0	0	0.0	13	0.3
SW	0	0.0	3	0.1	19	0.4	0	0.0	0	0.0	0	0.0	0	0.0	22	0.5
WSW	0	0.0	6	0.1	20	0.5	4	0.1	0	0.0	0	0.0	0	0.0	30	0.7
W	0	0.0	4	0.1	24	0.5	10	0.2	1	0.0	0	0.0	0	0.0	39	0.9
WNW	0	0.0	2	0.0	11	0.2	11	0.2	10	0.2	0	0.0	0	0.0	34	0.8
NW	0	0.0	0	0.0	6	0.1	6	0.1	4	0.1	0	0.0	0	0.0	16	0.4
NNW	0	0.0	0	0.0	6	0.1	6	0.1	1	0.0	0	0.0	0	0.0	13	0.3
	0	0.0	19	0.4	128	2.9	54	1.2	17	0.4	1	0.0	0	0.0	219	5.0

WIND SPEED: 7.1
 WIND DIRECTION: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: -1.4 TO -0.1 DEG C/100M
 CLASS D

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	22	0.5	50	1.1	11	0.2	1	0.0	0	0.0	0	0.0	84	1.9
NNE	0	0.0	14	0.3	46	1.0	1	0.0	0	0.0	0	0.0	0	0.0	61	1.4
NE	0	0.0	25	0.6	84	1.9	5	0.1	0	0.0	0	0.0	0	0.0	114	2.6
ENE	0	0.0	18	0.4	85	1.9	10	0.2	0	0.0	0	0.0	0	0.0	113	2.6
E	0	0.0	21	0.5	30	0.7	19	0.4	0	0.0	0	0.0	0	0.0	70	1.6
ESE	0	0.0	17	0.4	23	0.5	13	0.3	1	0.0	0	0.0	0	0.0	54	1.2
SE	0	0.0	13	0.3	47	1.1	13	0.3	1	0.0	0	0.0	0	0.0	74	1.7
SSE	0	0.0	18	0.4	72	1.6	13	0.3	10	0.2	0	0.0	0	0.0	113	2.6
S	0	0.0	13	0.3	58	1.3	32	0.7	3	0.1	0	0.0	0	0.0	106	2.4
SSW	0	0.0	23	0.5	56	1.3	23	0.5	3	0.1	0	0.0	0	0.0	105	2.4
SW	0	0.0	34	0.8	30	0.7	12	0.3	0	0.0	0	0.0	0	0.0	76	1.7
WSW	0	0.0	39	0.9	43	1.0	11	0.2	1	0.0	0	0.0	0	0.0	94	2.1
W	0	0.0	36	0.8	67	1.5	59	1.3	19	0.4	2	0.0	0	0.0	183	4.1
WNW	0	0.0	25	0.6	88	2.0	147	3.3	83	1.9	15	0.3	0	0.0	358	8.1
NW	0	0.0	20	0.5	58	1.3	84	1.9	28	0.6	0	0.0	0	0.0	190	4.3
NNW	0	0.0	22	0.5	33	0.7	41	0.9	24	0.5	0	0.0	0	0.0	120	2.7
	0	0.0	360	8.2	870	19.7	494	11.2	174	3.9	17	0.4	0	0.0	1915	43.4

MEAN WIND SPEED: 7.0
 MISSING: 0

BRICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 1
DELTA T: (266-26FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	COUNT	PERCENT
N	0	0.0	37	0.8	11	0.2	1	0.0	0	0.0	0	0.0	0	0.0	49	1.1
NNE	0	0.0	30	0.7	13	0.3	0	0.0	0	0.0	0	0.0	0	0.0	43	1.0
NE	0	0.0	44	1.0	11	0.2	0	0.0	0	0.0	0	0.0	0	0.0	55	1.2
ENE	0	0.0	28	0.6	32	0.7	1	0.0	0	0.0	0	0.0	0	0.0	61	1.4
E	0	0.0	45	1.0	33	0.7	10	0.2	0	0.0	0	0.0	0	0.0	88	2.0
ESE	0	0.0	24	0.5	26	0.6	3	0.1	0	0.0	0	0.0	0	0.0	53	1.2
SE	0	0.0	18	0.4	21	0.5	4	0.1	0	0.0	0	0.0	0	0.0	43	1.0
SSE	0	0.0	29	0.7	39	0.9	4	0.1	0	0.0	0	0.0	0	0.0	72	1.6
S	0	0.0	39	0.9	65	1.5	8	0.2	2	0.0	0	0.0	0	0.0	114	2.6
SSW	0	0.0	54	1.2	48	1.1	7	0.2	0	0.0	0	0.0	0	0.0	109	2.5
SW	0	0.0	72	1.6	38	0.9	6	0.1	0	0.0	0	0.0	0	0.0	116	2.6
WSW	0	0.0	57	1.3	25	0.6	4	0.1	0	0.0	0	0.0	0	0.0	86	1.9
W	0	0.0	60	1.4	60	1.4	9	0.2	0	0.0	0	0.0	0	0.0	129	2.9
WNW	0	0.0	63	1.4	104	2.4	13	0.3	0	0.0	0	0.0	0	0.0	180	4.1
NW	0	0.0	37	0.8	48	1.1	13	0.3	1	0.0	0	0.0	0	0.0	99	2.2
NNW	0	0.0	21	0.5	21	0.5	3	0.1	0	0.0	0	0.0	0	0.0	45	1.0
	0	0.0	658	14.9	595	13.5	86	1.9	3	0.1	0	0.0	0	0.0	1342	30.4

MIN WIND SPEED: 4.0
SING: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
 CLASS F

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	23	0.5	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	25	0.6
NNE	0	0.0	28	0.6	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29	0.7
NE	0	0.0	36	0.8	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	37	0.8
ENE	0	0.0	30	0.7	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	33	0.7
E	0	0.0	30	0.7	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	32	0.7
ESE	0	0.0	21	0.5	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	24	0.5
SE	0	0.0	18	0.4	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	0.4
SSE	0	0.0	14	0.3	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	18	0.4
S	0	0.0	11	0.2	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	17	0.4
SSW	0	0.0	22	0.5	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	25	0.6
SW	0	0.0	44	1.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	47	1.1
WSW	0	0.0	51	1.2	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	55	1.2
W	0	0.0	58	1.3	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	62	1.4
WNW	0	0.0	75	1.7	23	0.5	0	0.0	0	0.0	0	0.0	0	0.0	98	2.2
NW	0	0.0	45	1.0	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0	55	1.2
NNW	0	0.0	17	0.4	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	18	0.4
	0	0.0	523	11.8	71	1.6	0	0.0	0	0.0	0	0.0	0	0.0	594	13.5

MEAN WIND SPEED: 2.3
 MISSING: 0

PERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

LAPSE RATE: GT 4.0 DEG C/100M
 CLASS 0

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	15	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	0.3
NNE	0	0.0	18	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	18	0.4
NE	0	0.0	22	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	22	0.5
ENE	0	0.0	23	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	23	0.5
E	0	0.0	12	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
ESE	0	0.0		0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
SE	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
SSE	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
S	0	0.0	7	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	0.2
SSW	0	0.0	8	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	0.2
SW	0	0.0	12	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
WSW	0	0.0	14	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	0.3
W	0	0.0	51	1.2	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	54	1.2
WNW	0	0.0	23	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	23	0.5
NW	0	0.0	27	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	27	0.6
NNW	0	0.0	12	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	0.3
	0	0.0	257	5.8	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	260	5.9

WIND SPEED: 1.7
 Gusting: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	97	2.2	73	1.7	14	0.3	2	0.0	0	0.0	0	0.0	186	4.2
NNE	0	0.0	90	2.0	68	1.5	3	0.1	0	0.0	0	0.0	0	0.0	161	3.6
NE	0	0.0	127	2.9	107	2.4	5	0.1	0	0.0	0	0.0	0	0.0	239	5.4
ENE	0	0.0	100	2.3	132	3.0	12	0.3	0	0.0	1	0.0	0	0.0	245	5.5
E	0	0.0	108	2.4	66	1.5	29	0.7	0	0.0	0	0.0	0	0.0	203	4.6
ESE	0	0.0	67	1.5	53	1.2	16	0.4	1	0.0	0	0.0	0	0.0	137	3.1
SE	0	0.0	53	1.2	70	1.6	17	0.4	1	0.0	0	0.0	0	0.0	141	3.2
SSE	0	0.0	66	1.5	115	2.6	21	0.5	10	0.2	0	0.0	0	0.0	212	4.8
S	0	0.0	72	1.6	134	3.0	49	1.1	5	0.1	0	0.0	0	0.0	260	5.9
SSW	0	0.0	108	2.4	120	2.7	38	0.9	3	0.1	0	0.0	0	0.0	269	6.1
SW	0	0.0	165	3.7	105	2.4	22	0.5	0	0.0	0	0.0	0	0.0	292	6.6
WSW	0	0.0	167	3.8	102	2.3	28	0.6	1	0.0	0	0.0	0	0.0	298	6.7
W	0	0.0	209	4.7	163	3.7	84	1.9	20	0.5	2	0.0	0	0.0	478	10.8
WNW	0	0.0	188	4.3	229	5.2	173	3.9	93	2.1	15	0.3	0	0.0	698	15.8
NW	0	0.0	129	2.9	122	2.8	103	2.3	33	0.7	0	0.0	0	0.0	387	8.8
NNW	0	0.0	72	1.6	63	1.4	50	1.1	25	0.6	0	0.0	0	0.0	210	4.8
	0	0.0	1818	41.2	1722	39.0	664	15.0	194	4.4	18	0.4	0	0.0	4416	100.0

MISSING HOURS: 0

MEAN WIND SPEED: 5.1

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 1
 DELTA T: (266-26FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
N	0	0.0	91	2.2	73	1.7	14	0.3	2	0.0	0	0.0	0	0.0	186	4.2
NNE	0	0.0	90	2.0	68	1.5	3	0.1	0	0.0	0	0.0	0	0.0	161	3.6
NE	0	0.0	127	2.9	107	2.4	5	0.1	0	0.0	0	0.0	0	0.0	239	5.4
ENE	0	0.0	100	2.3	132	3.0	12	0.3	0	0.0	1	0.0	0	0.0	245	5.5
E	0	0.0	108	2.4	66	1.5	29	0.7	0	0.0	0	0.0	0	0.0	203	4.6
ESE	0	0.0	67	1.5	53	1.2	16	0.4	1	0.0	0	0.0	0	0.0	137	3.1
SE	0	0.0	53	1.2	70	1.6	17	0.4	1	0.0	0	0.0	0	0.0	141	3.2
SSE	0	0.0	66	1.5	115	2.6	21	0.5	10	0.2	0	0.0	0	0.0	212	4.8
S	0	0.0	72	1.6	134	3.0	49	1.1	5	0.1	0	0.0	0	0.0	260	5.9
SSW	0	0.0	108	2.4	120	2.7	38	0.9	3	0.1	0	0.0	0	0.0	269	6.1
SW	0	0.0	165	3.7	105	2.4	22	0.5	0	0.0	0	0.0	0	0.0	292	6.6
WSW	0	0.0	167	3.8	102	2.3	28	0.6	1	0.0	0	0.0	0	0.0	298	6.7
W	0	0.0	209	4.7	163	3.7	84	1.9	20	0.5	2	0.0	0	0.0	478	10.8
WNW	0	0.0	188	4.3	229	5.2	173	3.9	93	2.1	15	0.3	0	0.0	698	15.8
NW	0	0.0	129	2.9	122	2.8	103	2.3	33	0.7	0	0.0	0	0.0	387	8.8
NNW	0	0.0	72	1.6	63	1.4	50	1.1	25	0.6	0	0.0	0	0.0	210	4.8
	0	0.0	1818	41.2	1722	39.0	664	15.0	194	4.4	18	0.4	0	0.0	4416	100.0

MISSING HOURS: 0

WIND SPEED: 5.1

LIMERICK GENERATING STATION
DATA RECOVERY SUMMARY

LEVEL 1 - TOWER 1 30' OR TOWER 2 159'

PARAMETER	COUNT	PERCENT
PRIMARY SPEED GOOD HOURS	4413	99.93%
BACKUP SPEED GOOD HOURS	4410	99.86%
BACKUP SPEED HOURS USED	3	0.07%
TOTAL AVAILABLE SPEED HOURS	4416	100.00%
PRIMARY DIRECTION GOOD HOURS	4413	99.93%
BACKUP DIRECTION GOOD HOURS	4412	99.91%
BACKUP DIRECTION HOURS USED	3	0.07%
TOTAL AVAILABLE DIRECTION HOURS	4416	100.00%
PRIMARY (266-26') DELTA TEMP HOURS	4151	94.00%
BACKUP (300-26') DELTA TEMP HOURS	4387	99.34%
BACKUP DELTA TEMP HOURS USED	265	6.00%
TOTAL AVAILABLE DELTA TEMP HOURS	4416	100.00%
LEVEL 1 JOINT DATA RECOVERY:	4416	100.00%

BERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 2
DELTA T: (266-26FT)

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0
ENE	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	0	0.0	0	0.0	1	0.0	4	0.1	0	0.0	0	0.0	5	0.1
SSW	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SW	0	0.0	0	0.0	4	0.1	1	0.0	3	0.1	0	0.0	0	0.0	8	0.2
WSW	0	0.0	0	0.0	3	0.1	2	0.0	6	0.1	0	0.0	0	0.0	11	0.2
W	0	0.0	0	0.0	1	0.0	1	0.0	1	0.0	0	0.0	0	0.0	3	0.1
WNW	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NW	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	14	0.3	8	0.2	14	0.3	0	0.0	0	0.0	36	0.8

WIND SPEED: 10.4
Gusting: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
 CLASS B

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
NNE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ENE	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.0
E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SSW	0	0.0	0	0.0	1	0.0	4	0.1	0	0.0	0	0.0	0	0.0	5	0.1
SW	0	0.0	0	0.0	5	0.1	4	0.1	0	0.0	0	0.0	0	0.0	9	0.2
WSW	0	0.0	0	0.0	4	0.1	4	0.1	1	0.0	0	0.0	0	0.0	9	0.2
W	0	0.0	0	0.0	2	0.0	9	0.2	1	0.0	0	0.0	0	0.0	12	0.3
WNW	0	0.0	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0	4	0.1
NW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
	0	0.0	1	0.0	18	0.4	29	0.7	2	0.0	0	0.0	0	0.0	50	1.1

MEAN WIND SPEED: 8.6

MISSING: 0

ERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
 CLASS C

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
N	0	0.0	0	0.0	4	0.1	8	0.2	1	0.0	0	0.0	0	0.0	13	0.3
NNE	0	0.0	0	0.0	3	0.1	5	0.1	0	0.0	1	0.0	0	0.0	9	0.2
NE	0	0.0	0	0.0	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
ENE	0	0.0	0	0.0	7	0.2	4	0.1	0	0.0	0	0.0	0	0.0	11	0.2
E	0	0.0	0	0.0	2	0.0	3	0.1	0	0.0	0	0.0	0	0.0	5	0.1
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	1	0.0	2	0.0	6	0.1	2	0.0	0	0.0	0	0.0	11	0.2
SSW	0	0.0	0	0.0	2	0.0	6	0.1	5	0.1	0	0.0	0	0.0	13	0.3
SW	0	0.0	1	0.0	11	0.2	7	0.2	0	0.0	0	0.0	0	0.0	19	0.4
WSW	0	0.0	5	0.1	8	0.2	8	0.2	4	0.1	0	0.0	0	0.0	25	0.6
W	0	0.0	1	0.0	16	0.4	20	0.5	4	0.1	2	0.0	0	0.0	43	1.0
WNW	0	0.0	2	0.0	6	0.1	7	0.2	9	0.2	8	0.2	1	0.0	33	0.7
NW	0	0.0	1	0.0	3	0.1	5	0.1	8	0.2	1	0.0	0	0.0	18	0.4
NNW	0	0.0	0	0.0	5	0.1	1	0.0	8	0.2	1	0.0	0	0.0	15	0.3
	0	0.0	11	0.2	72	1.6	81	1.8	41	0.9	13	0.3	1	0.0	219	5.0

WIND SPEED: 9.8
 DIR: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
 CLASS D

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	7	0.2	36	0.8	31	0.7	14	0.3	5	0.1	0	0.0	93	2.1
NNE	0	0.0	7	0.2	37	0.8	26	0.6	0	0.0	0	0.0	0	0.0	70	1.6
NE	0	0.0	12	0.3	48	1.1	45	1.0	2	0.0	0	0.0	0	0.0	107	2.4
ENE	0	0.0	6	0.1	70	1.6	37	0.8	1	0.0	0	0.0	0	0.0	114	2.6
E	0	0.0	10	0.2	25	0.6	33	0.7	9	0.2	0	0.0	0	0.0	77	1.7
ESE	0	0.0	10	0.2	13	0.3	13	0.3	4	0.1	1	0.0	0	0.0	41	0.9
SE	0	0.0	8	0.2	24	0.5	23	0.5	7	0.2	0	0.0	0	0.0	62	1.4
SSE	0	0.0	9	0.2	22	0.5	54	1.2	7	0.2	8	0.2	0	0.0	100	2.3
S	0	0.0	15	0.3	41	0.9	56	1.3	23	0.5	3	0.1	0	0.0	138	3.1
SSW	0	0.0	21	0.5	32	0.7	47	1.1	25	0.6	4	0.1	1	0.0	130	2.9
SW	0	0.0	10	0.2	35	0.8	23	0.5	9	0.2	2	0.0	0	0.0	79	1.8
WSW	0	0.0	22	0.5	25	0.5	23	0.5	11	0.2	2	0.0	1	0.0	84	1.9
W	0	0.0	22	0.5	40	0.9	24	0.5	41	0.9	13	0.3	3	0.1	143	3.2
WNW	0	0.0	15	0.3	52	1.2	73	1.7	105	2.4	62	1.4	23	0.5	330	7.5
NW	0	0.0	11	0.2	35	0.8	43	1.0	104	2.4	32	0.7	5	0.1	230	5.2
NNW	0	0.0	7	0.2	24	0.5	30	0.7	44	1.0	12	0.3	0	0.0	117	2.6
	0	0.0	192	4.3	559	12.7	581	13.2	406	9.2	144	3.3	33	0.7	1915	43.4

MEAN WIND SPEED: 10.1

MISSING: 0

BRICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 2
DELTA T: (266-26FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	12	0.3	15	0.3	16	0.4	4	0.1	0	0.0	0	0.0	47	1.1
NNE	0	0.0	7	0.2	14	0.3	6	0.1	2	0.0	0	0.0	0	0.0	29	0.7
NE	0	0.0	8	0.2	29	0.7	5	0.1	1	0.0	0	0.0	0	0.0	43	1.0
ENE	0	0.0	7	0.2	43	1.0	10	0.2	0	0.0	0	0.0	0	0.0	60	1.4
E	0	0.0	2	0.0	17	0.4	31	0.7	7	0.2	0	0.0	0	0.0	57	1.3
ESE	0	0.0	7	0.2	13	0.3	21	0.5	6	0.1	0	0.0	0	0.0	47	1.1
SE	0	0.0	7	0.2	19	0.4	11	0.2	4	0.1	0	0.0	0	0.0	41	0.9
SSE	0	0.0	8	0.2	42	1.0	18	0.4	2	0.0	0	0.0	0	0.0	70	1.6
S	0	0.0	13	0.3	48	1.1	45	1.0	9	0.2	2	0.0	0	0.0	117	2.6
SSW	0	0.0	14	0.3	50	1.1	52	1.2	10	0.2	0	0.0	0	0.0	126	2.9
SW	0	0.0	17	0.4	64	1.4	32	0.7	10	0.2	2	0.0	0	0.0	125	2.8
WSW	0	0.0	21	0.5	53	1.2	29	0.7	3	0.1	1	0.0	0	0.0	107	2.4
W	0	0.0	13	0.3	43	1.0	43	1.0	15	0.3	0	0.0	0	0.0	114	2.6
WNW	0	0.0	12	0.3	62	1.4	77	1.7	12	0.3	0	0.0	0	0.0	163	3.7
NW	0	0.0	6	0.1	41	0.9	71	1.6	20	0.5	1	0.0	0	0.0	139	3.1
NNW	0	0.0	8	0.2	22	0.5	24	0.5	2	0.0	1	0.0	0	0.0	57	1.3
	0	0.0	162	3.7	575	13.0	491	11.1	107	2.4	7	0.2	0	0.0	1342	30.4

MIN WIND SPEED: 7.5
CROSSING: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
 CLASS F

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
N	0	0.0	4	0.1	6	0.1	9	0.2	0	0.0	0	0.0	0	0.0	19	0.4
NNE	0	0.0	4	0.1	4	0.1	3	0.1	0	0.0	0	0.0	0	0.0	11	0.2
NE	0	0.0	1	0.0	5	0.1	1	0.0	0	0.0	0	0.0	0	0.0	7	0.2
ENE	0	0.0	3	0.1	3	0.1	2	0.0	0	0.0	0	0.0	0	0.0	8	0.2
E	0	0.0	2	0.0	8	0.2	1	0.0	1	0.0	0	0.0	0	0.0	12	0.3
ESE	0	0.0	5	0.1	14	0.3	0	0.0	0	0.0	0	0.0	0	0.0	19	0.4
SE	0	0.0	5	0.1	7	0.2	1	0.0	0	0.0	0	0.0	0	0.0	13	0.3
SSE	0	0.0	13	0.3	9	0.2	1	0.0	0	0.0	0	0.0	0	0.0	23	0.5
S	0	0.0	12	0.3	22	0.5	0	0.0	0	0.0	0	0.0	0	0.0	34	0.8
ESW	0	0.0	20	0.5	19	0.4	8	0.2	0	0.0	0	0.0	0	0.0	47	1.1
SW	1	0.0	17	0.4	29	0.7	18	0.4	0	0.0	0	0.0	0	0.0	65	1.5
WSW	0	0.0	20	0.5	24	0.5	4	0.1	0	0.0	0	0.0	0	0.0	48	1.1
W	0	0.0	24	0.5	25	0.6	9	0.2	1	0.0	0	0.0	0	0.0	59	1.3
WNW	0	0.0	10	0.2	79	1.8	43	1.0	1	0.0	0	0.0	0	0.0	133	3.0
NW	0	0.0	11	0.2	52	1.2	12	0.3	1	0.0	0	0.0	0	0.0	76	1.7
NNW	0	0.0	1	0.0	11	0.2	8	0.2	0	0.0	0	0.0	0	0.0	20	0.5
	1	0.0	152	3.4	317	7.2	120	2.7	4	0.1	0	0.0	0	0.0	594	13.5

MEAN WIND SPEED: 5.5
 MISSING: 0

BRICK MET DATA 7/90 -12/90

JL:NT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS

WIND: LEVEL 2
DELTA T: (266-26FT)

LAPSE RATE: GT 4.0 DEG C/100M
CLASS 0

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT			
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NNE	0	0.0	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
NE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ENE	0	0.0	3	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
E	0	0.0	3	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
ESE	0	0.0	3	0.1	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
SE	0	0.0	9	0.2	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.2
SSE	0	0.0	7	0.2	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	11	0.2
S	0	0.0	14	0.3	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	16	0.4
SSW	0	0.0	10	0.2	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0	16	0.4
SW	0	0.0	21	0.5	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0	31	0.7
WSW	0	0.0	14	0.3	11	0.2	1	0.0	0	0.0	0	0.0	0	0.0	26	0.6
W	0	0.0	17	0.4	15	0.3	1	0.0	0	0.0	0	0.0	0	0.0	33	0.7
WNW	0	0.0	13	0.3	46	1.0	8	0.2	0	0.0	0	0.0	0	0.0	67	1.5
NW	0	0.0	3	0.1	21	0.5	3	0.1	0	0.0	0	0.0	0	0.0	27	0.6
NNW	0	0.0	4	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.1
	0	0.0	124	2.8	123	2.8	13	0.3	0	0.0	0	0.0	0	0.0	260	5.9

WIND SPEED: 4.0
GUSTING: 0

LIMERICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
N	0	0.0	24	0.5	63	1.4	65	1.5	19	0.4	5	0.1	0	0.0	176	4.0
NNE	0	0.0	20	0.5	60	1.4	40	2.9	2	0.0	1	0.0	0	0.0	123	2.8
NE	0	0.0	21	0.5	68	2.0	52	1.2	3	0.1	0	0.0	0	0.0	164	3.7
ENE	0	0.0	19	0.4	128	2.9	54	1.2	1	0.0	0	0.0	0	0.0	202	4.6
E	0	0.0	17	0.4	53	1.2	68	1.5	17	0.4	0	0.0	0	0.0	155	3.5
ESE	0	0.0	25	0.6	42	1.0	35	0.8	10	0.2	1	0.0	0	0.0	113	2.6
SE	0	0.0	29	0.7	51	1.2	35	0.8	11	0.2	0	0.0	0	0.0	126	2.9
SSE	0	0.0	37	0.8	78	1.8	75	1.7	9	0.2	8	0.2	0	0.0	207	4.7
S	0	0.0	56	1.3	115	2.6	108	2.4	38	0.9	5	0.1	0	0.0	322	7.3
SSW	0	0.0	65	1.5	110	2.5	118	2.7	40	0.9	4	0.1	1	0.0	338	7.7
SW	1	0.0	66	1.5	158	3.6	85	1.9	22	0.5	4	0.1	0	0.0	336	7.6
WSW	0	0.0	82	1.9	128	2.9	71	1.6	25	0.6	3	0.1	1	0.0	310	7.0
W	0	0.0	77	1.7	142	3.2	107	2.4	63	1.4	15	0.3	3	0.1	407	9.2
WNW	0	0.0	52	1.2	245	5.5	213	4.8	127	2.9	70	1.6	24	0.5	731	16.6
NW	0	0.0	32	0.7	153	3.5	134	3.0	133	3.0	34	0.8	5	0.1	491	11.1
NNW	0	0.0	20	0.5	64	1.4	63	1.4	54	1.2	14	0.3	0	0.0	215	4.9
	1	0.0	642	14.5	1678	38.0	1323	30.0	574	13.0	164	3.7	34	0.8	4416	100.0

MISSING HOURS: 0

MEAN WIND SPEED: 8.3

BRICK MET DATA 7/90 -12/90

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
 BY ATMOSPHERIC STABILITY CLASS
 WIND: LEVEL 2
 DELTA T: (266-26FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
N	0	0.0	24	0.5	63	1.4	65	1.5	19	0.4	5	0.1	0	0.0	176	4.0
NNE	0	0.0	20	0.5	60	1.4	40	0.9	2	0.0	1	0.0	0	0.0	123	2.8
NE	0	0.0	21	0.5	88	2.0	52	1.2	3	0.1	0	0.0	0	0.0	164	3.7
ENE	0	0.0	19	0.4	128	2.9	54	1.2	1	0.0	0	0.0	0	0.0	202	4.6
E	0	0.0	17	0.4	53	1.2	68	1.5	17	0.4	0	0.0	0	0.0	155	3.5
ESE	0	0.0	25	0.6	42	1.0	35	0.8	10	0.2	1	0.0	0	0.0	113	2.6
SE	0	0.0	29	0.7	51	1.2	35	0.8	11	0.2	0	0.0	0	0.0	126	2.9
SSE	0	0.0	37	0.8	78	1.8	75	1.7	9	0.2	8	0.2	0	0.0	207	4.7
S	0	0.0	56	1.3	115	2.6	108	2.4	38	0.9	5	0.1	0	0.0	322	7.3
SSW	0	0.0	65	1.5	110	2.5	118	2.7	40	0.9	4	0.1	1	0.0	338	7.7
SW	1	0.0	66	1.5	158	3.6	85	1.9	22	0.5	4	0.1	0	0.0	336	7.6
WSW	0	0.0	82	1.9	128	2.9	71	1.6	25	0.6	3	0.1	1	0.0	310	7.0
W	0	0.0	77	1.7	142	3.2	107	2.4	63	1.4	15	0.3	3	0.1	407	9.2
WNW	0	0.0	52	1.2	245	5.5	213	4.8	127	2.9	70	1.6	24	0.5	731	16.6
NW	0	0.0	32	0.7	153	3.5	134	3.0	133	3.0	34	0.8	5	0.1	491	11.1
NNW	0	0.0	20	0.5	64	1.4	63	1.4	54	1.2	14	0.3	0	0.0	215	4.9
TOTAL	1	0.0	642	14.5	1676	38.0	1323	30.0	574	13.0	164	3.7	34	0.8	4416	100.0

MISSING HOURS: 0

WIND SPEED: 8.3

LIMERICK GENERATING STATION
DATA RECOVERY SUMMARY

LEVEL 2 - TOWER 1 175' OR TOWER 2 304'

PARAMETER	COUNT	PERCENT
PRIMARY SPEED GOOD HOURS	4412	99.91%
BACKUP SPEED GOOD HOURS	4409	99.84%
BACKUP SPEED HOURS USED	4	0.09%
TOTAL AVAILABLE SPEED HOURS	4416	100.00%
PRIMARY DIRECTION GOOD HOURS	4412	99.91%
BACKUP DIRECTION GOOD HOURS	4413	99.93%
BACKUP DIRECTION HOURS USED	4	0.09%
TOTAL AVAILABLE DIRECTION HOURS	4416	100.00%
PRIMARY (266-26') DELTA TEMP HOURS	4151	94.00%
BACKUP (300-26') DELTA TEMP HOURS	4387	99.34%
BACKUP DELTA TEMP HOURS USED	265	6.00%
TOTAL AVAILABLE DELTA TEMP HOURS	4416	100.00%
LEVEL 2 JOINT DATA RECOVERY:	4416	100.00%