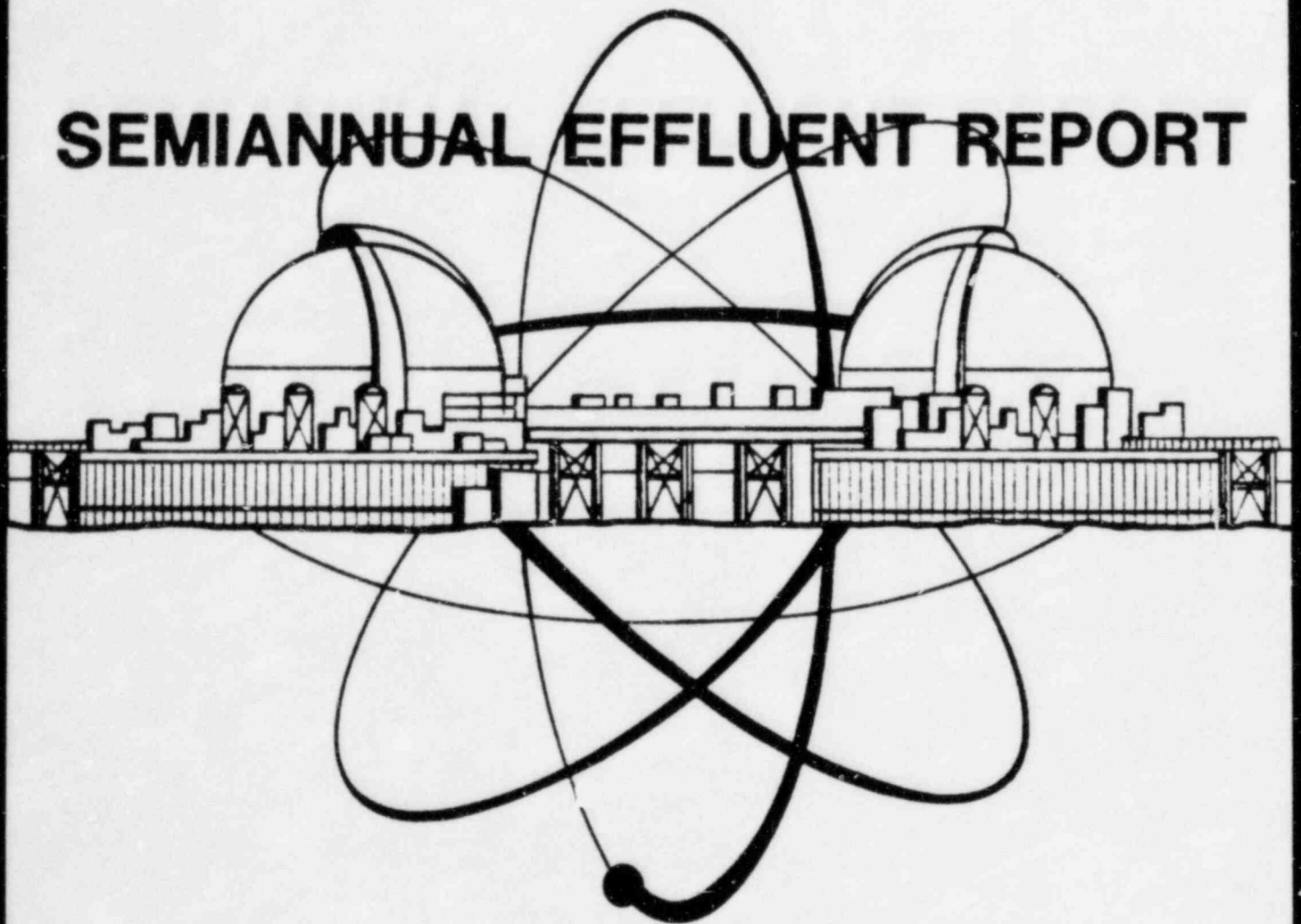


**SAN ONOFRE
NUCLEAR GENERATING STATION
UNITS 2 & 3**

SEMIANNUAL EFFLUENT REPORT



**SONGS - 2 & 3
JULY - DECEMBER 1983**

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SEMIANNUAL EFFLUENT REPORT

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SEMIANNUAL EFFLUENT REPORT

July - December 1983

SECTION A. INTRODUCTION

This Semiannual Report summarizes the gaseous and liquid radioactive effluent releases and solid waste shipments made from the San Onofre Nuclear Generating Station, Units 2 and 3. This report is prepared in the general format of USNRC Regulatory Guide 1.21 and includes:

1. Quarterly summaries of liquid and gaseous effluents for "batch" and "continuous" modes of release;
2. Percent of Technical Specification Limits;
3. Estimated total percent error;
4. Lower limit of detection concentrations;
5. Meteorological data;
6. 10 CFR 50 Appendix I considerations;
7. 40 CFR 190 considerations;
8. Radwaste shipments.

SECTION B. GASEOUS EFFLUENTS

Table 1A, "Gaseous Effluents - Summation of All Releases," provides a detailed listing of gaseous effluents released quarterly in four categories: fission and activation gases, iodine-131, particulates with half-lives greater than eight days, and tritium. Listed are the total releases of each category, the average release rate for the quarter, and the percent of Technical Specification Limit (TSL).

The percent estimated total error is listed in Table 1A for each of the four gaseous effluent categories. The methodology used for error analysis is described in Section F of this report.

Table 1B, "Gaseous Effluents - Elevated Release," has not been included in this report since it is assigned to elevated releases and San Onofre Nuclear Generating Station Units 2 and 3 do not have elevated releases.

Table 1C, "Gaseous Effluents - Ground-Level Releases," provides the systematic listing by radionuclide for the quantity of radioactivity released in three categories: fission gases, iodines, and particulates. The total radioactivity for each radionuclide is listed for each quarterly period by both "continuous" and "batch" modes of release.

Waste gas decay tank and calibration releases are considered to be "batch" releases. Containment purges and plant stack releases are considered to be "continuous" releases.

Table 1D, "Gaseous Effluents - Lower Limit of Detection," provides the listing of lower limit of detection concentrations for radionuclides not detected in Table 1C.

Table 1E, "Gaseous Effluents - Radiation Doses at Site Boundary," provides a summary of doses at the site boundary for this reporting period, by quarter.

The values for the composite gross alpha, Sr-89 and Sr-90, (Tables 1A and Table 1B Gaseous Effluents), for the January - June Semiannual Report were incomplete because data was not available prior to reporting time. The values not reported were for the second quarter, 1983. The values not reported are as follows:

	<u>Unit</u>	
Gross alphas	Ci	5.86E-11
Sr-89	Ci	LLD
Sr-90	Ci	LLD

LLD = $< 1.91\text{E-}13 \text{ } \mu\text{Ci/ml}$

TABLE 1A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

		Unit	Quarter Third	Quarter Fourth	Est. Total Error, %
A. Fission & activation gases					
1.	Total release	Ci	3.59E+2	6.78E+3	2.50E+1
2.	Average release rate for period	μCi/sec	4.52E+1	8.52E+2	
3.	Percent of technical specification limit	%	3.78E-1	6.91E+0	
B. Iodines					
1.	Total iodine-131	Ci	5.84E-3	8.69E-2	1.90E+1
2.	Average release rate for period	μCi/sec	7.35E-4	1.09E-2	
3.	Percent of technical specification limit	%	1.76E-2	2.62E-1	
C. Particulates					
1.	Particulates with half-lives > 8 days	Ci	1.10E-5	2.68E-5	1.60E+1
2.	Average release rate for period	μCi/sec	1.38E-6	3.37E-6	
3.	Percent of technical specification limit	%	1.70E-6	1.37E-5	
4.	Gross alpha radioactivity	Ci	1.60E-10	5.60E-11*	5.00E+1
D. Tritium					
1.	Total release	Ci	1.14E+1	5.43E-1	2.50E+1
2.	Average release rate for period	μCi/sec	1.43E+0	6.83E-2	
3.	Percent of technical specification limit	%	2.13E-2	8.20E-4	

*Incomplete data; value reported is calculated using only October analyses.
The following Semiannual Report will include November and December analyses.

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
GASEOUS EFFLUENTS - GROUND-LEVEL RELEASES

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		Quarter Third	Quarter Fourth	Quarter Third	Quarter Fourth
1. Fission Gases					
krypton-85	Ci	LLD	LLD	4.54E-1	2.52E+0
krypton-85m	Ci	6.64E-2	2.49E+0	6.04E-4	1.07E-2
krypton-87	Ci	LLD	1.17E-2	LLD	LLD
krypton-88	Ci	LLD	6.46E-1	LLD	4.76E-3
xenon-131m	Ci	LLD	1.34E+1	1.55E+0	6.32E+0
xenon-133	Ci	2.94E+2	6.55E+3	5.76E+1	1.07E+2
xenon-133m	Ci	1.41E+0	5.07E+1	9.07E-2	9.01E-2
xenon-135	Ci	1.27E+0	3.74E+1	4.18E-2	8.73E-2
xenon-135m	Ci	LLD	LLD	LLD	LLD
xenon-138	Ci	LLD	LLD	LLD	LLD
argon-41	Ci	1.01E+0	3.95E+0	LLD	LLD
Total	Ci	2.99E+2	6.66E+3	5.97E+1	1.16E+2
2. Iodines					
iodine-131	Ci	5.84E-3	8.69E-2	LLD	LLD
iodine-132	Ci	4.35E-6	1.31E-4	LLD	LLD
iodine-133	Ci	2.64E-3	2.49E-2	LLD	LLD
iodine-134	Ci	LLD	2.27E-5	LLD	LLD
iodine-135	Ci	1.10E-4	1.25E-3	LLD	LLD
Total	Ci	8.59E-3	1.13E-1	LLD	LLD
3. Particulates					
barium-lanthanum-140	Ci	LLD	LLD	LLD	LLD
bromine-82	Ci	2.28E-5	8.94E-5	LLD	LLD
cesium-134	Ci	LLD	7.61E-9	LLD	LLD
cesium-136	Ci	LLD	5.96E-8	LLD	LLD
cesium-137	Ci	9.30E-8	2.13E-5	LLD	LLD
cesium-138	Ci	LLD	1.51E-5	LLD	LLD
cobalt-58	Ci	1.09E-5	5.41E-6	LLD	LLD
cobalt-60	Ci	LLD	LLD	LLD	LLD
iron-55	Ci	3.69E-10	**	*	*
manganese-54	Ci	LLD	2.61E-8	LLD	LLD
manganese-56	Ci	LLD	1.92E-5	LLD	LLD
molybdenum-99	Ci	LLD	6.44E-5	LLD	LLD
rubidium-88	Ci	LLD	3.61E-3	LLD	LLD
sodium-24	Ci	6.10E-6	4.56E-6	LLD	LLD
strontium-89	Ci	7.38E-10	**	*	*
strontium-90	Ci	2.82E-11	**	*	*
technetium-99m	Ci	3.11E-8	7.92E-5	LLD	LLD
yttrium-92	Ci	LLD	3.06E-7	LLD	LLD

*Batch releases are not reported separately. All batch releases are vented through the Plant Vent Stack, therefore Sr89, Sr90 and Fe55 are analyzed by the "Continuous" mode only.

**Fourth quarter analyses were not available at time of report and will be reported in the following Semiannual report.

LLD - Lower Limit of Detection; See Table 1D.

TABLE 1D

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
GASEOUS EFFLUENTS - LOWER LIMIT OF DETECTION

NUCLIDE	CONTINUOUS MODE ($\mu\text{Ci/cc}$)	BATCH MODE ($\mu\text{Ci/cc}$)
krypton-85	<1.80E-4	*
krypton-87	<3.34E-6	<2.10E-6
krypton-88	<2.46E-6	<2.69E-6
xenon-131m	<2.42E-5	*
xenon-135m	<8.47E-6	<2.43E-6
xenon-138	<2.85E-5	<8.01E-6
argon-41	*	<1.03E-6
iodine-134	<9.09E-11	NA
barium-140	<3.20E-12	NA
cesium-134	<1.26E-12	NA
cesium-136	<1.03E-12	NA
cesium-138	<1.41E-12	NA
cobalt-60	<1.41E-12	NA
lanthanum-140	<1.45E-12	NA
manganese-54	<1.13E-12	NA
manganese-56	<2.36E-12	NA
molybdenum-99	<7.08E-13	NA
rubidium-88	<1.49E-11	NA
yttrium-92	<1.04E-11	NA

*-Nuclide detected in Table 1C.

NA - Iodines and particulates are not analyzed prior to release.

TABLE 1E

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
 GASEOUS EFFLUENTS-RADIATION DOSES AT THE SITE BOUNDARY

	Unit	Third Quarter	Fourth Quarter
A. <u>Noble Gas</u>			
1. Gamma air dose	mrad	1.11E-1	1.90E+0
2. Percent Technical Specification Limit	%	1.11E+0	1.90E+1
3. Beta air dose	mrad	2.93E-1	5.49E+0
4. Percent Technical Specification Limit	%	1.47E+0	2.75E+1
B. <u>Tritium, Iodine, Particulate</u>			
1. Organ dose	mrem	1.13E-1	1.66E+0
2. Percent Technical Specification Limit	%	7.53E-1	1.11E+1

NOTE: Calculations performed in accordance with the ODCM utilizing the historical X/Q.

SECTION C. LIQUID EFFLUENTS

Table 2A, "Liquid Effluents - Summation of All Releases," provides a detailed listing of liquid effluent releases in three categories: Fission and activation products, tritium, and dissolved and entrained gases. Listed are (1) the total release of each category, (2) the average diluted concentration at the point of discharge during each quarterly period, and (3) the percent of Technical Specification Limit. Also listed are the gross alpha radioactivity, the volume of actual waste released (prior to dilution by the circulating water), and the volume of dilution water (the volume of circulating water) used to dilute the batch releases.

The percent estimated total error is listed in Table 2A for each of the three liquid effluent categories. The methodology used for error analysis is described in Section F of this report. The methodology used in calculating the percent of applicable limit is presented in Section E of this report.

Table 2B, "Liquid Effluents," provides the systematic listing by radionuclide for the quantity of radioactivity released in each category. The total radioactivity of each radionuclide released is listed for each quarterly period by both "continuous" and "batch" modes of release.

Table 2C, "Liquid Effluents - Lower Limit of Detection," provides a listing of lower limit of detection concentrations for radionuclides not detected in Table 2B.

Table 2D, "Liquid Effluents - Radiation Doses at Site Boundary," provides a summary of doses at the site boundary for this reporting period, by quarter.

The values for the composite gross alpha, Sr-89 and Sr-90 in Table 2A and Table 2B Liquid Effluents, for the January - June Semiannual Report were incomplete because data was not available at reporting time. The gross alpha values not reported were for the months of May and June, 1983; Sr-89 and Sr-90 values were for the second quarter, 1983. The values not reported are as follows:

	<u>Unit</u>	
Gross alpha	Ci	LLD
Sr-89	Ci	LLD
Sr-90	Ci	LLD
Gross alpha LLD = < 5.50E-8 μ Ci/ml		
Sr-89, 90 LLD = < 3.20E-8 μ Ci/ml		

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1983)
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit	Third Quarter	Fourth Quarter	Estimated Total Error, %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	6.80E-1	9.01E-1	1.90E+1
2. Average diluted concentration during period	µCi/ml	1.98E-8	2.34E-8	
3. Percent of applicable limit	%	1.94E+0	3.40E+0	
=====				
B. Tritium				
1. Total release	Ci	4.85E+1	1.60E+2	1.90E+1
2. Average diluted concentration during period	µCi/ml	1.43E-6	4.16E-6	
3. Percent of applicable limit	%	4.76E-2	1.39E-1	
=====				
C. Dissolved and entrained gases				
1. Total release	Ci	4.43E-1	1.73E+0	1.90E+1
2. Average diluted concentration during period	µCi/ml	1.30E-8	4.49E-8	
3. Percent of applicable limit	%	6.50E-3	2.25E-2	
=====				
D. Gross alpha radioactivity				
1. Total release	Ci	LLD	*	5.00E+1
=====				
E. Volume of waste released (prior to dilution)				
	liters	5.85E+6	6.52E+6	5.00E+0
=====				
F. Volume of dilution water used during period				
	liters	3.40E+10	3.85E+10	5.00E+0

* - Fourth quarter analyses not available at report time; analyses will be included in the following Semiannual Report.

LLD - Lower Limit of Detection; see Table 2C.

TABLE 2B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
LIQUID EFFLUENTS

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		Third Quarter	Fourth Quarter	Third Quarter	Fourth Quarter
antimony-124	Ci	LLD	LLD	1.41E-3	3.46E-3
barium-140	Ci	LLD	LLD	LLD	5.69E-5
beryllium-7	Ci	LLD	LLD	1.09E-4	LLD
cerium-141	Ci	LLD	LLD	LLD	LLD
cerium-144	Ci	LLD	LLD	LLD	3.96E-4
cesium-134	Ci	LLD	LLD	7.02E-4	1.21E-2
cesium-136	Ci	LLD	LLD	8.56E-4	4.19E-3
cesium-137	Ci	LLD	LLD	1.10E-2	7.27E-2
cesium-138	Ci	LLD	LLD	LLD	4.76E-5
chromium-51	Ci	LLD	LLD	1.25E-1	7.34E-2
cobalt-57	Ci	LLD	LLD	1.79E-5	1.08E-4
cobalt-58	Ci	LLD	LLD	2.52E-1	2.04E-1
cobalt-60	Ci	LLD	LLD	1.94E-2	2.08E-2
iodine-131	Ci	LLD	LLD	1.89E-1	3.67E-1
iodine-132	Ci	LLD	LLD	LLD	1.21E-4
iodine-133	Ci	LLD	LLD	2.12E-2	5.17E-2
iodine-135	Ci	LLD	LLD	LLD	1.48E-3
iron-55	Ci	LLD	LLD	6.97E-3	*
iron-59	Ci	LLD	LLD	6.94E-3	1.58E-2
lanthanum-140	Ci	LLD	LLD	2.34E-5	3.06E-4
manganese-54	Ci	LLD	LLD	1.21E-2	1.33E-2
molybdenum-99	Ci	LLD	LLD	1.10E-3	1.12E-2
niobium 95	Ci	LLD	LLD	1.05E-2	9.54E-3
niobium 97	Ci	LLD	LLD	LLD	4.24E-4
rubidium-88	Ci	LLD	LLD	LLD	6.43E-4
ruthenium-103	Ci	LLD	LLD	3.77E-6	4.40E-5
sodium-24	Ci	LLD	LLD	1.05E-2	1.41E-2
strontium-89	Ci	LLD	LLD	5.34E-4	*
strontium-90	Ci	LLD	LLD	LLD	*
technetium-99m	Ci	LLD	LLD	1.27E-3	1.48E-2
tungsten-187	Ci	LLD	LLD	5.94E-5	1.46E-3
zinc-65	Ci	LLD	LLD	1.63E-4	3.21E-4
zirconium-95	Ci	LLD	LLD	8.74E-3	7.60E-3
zirconium-97	Ci	LLD	LLD	LLD	1.98E-4
Total for period	Ci	LLD	LLD	6.80E-1	9.01E-1
=====					
krypton-85m	Ci	LLD	LLD	6.88E-6	5.47E-5
xenon-131m	Ci	LLD	LLD	4.18E-4	1.53E-2
xenon-133	Ci	LLD	LLD	4.29E-1	1.68E+0
xenon-133m	Ci	LLD	LLD	4.93E-3	1.95E-2
xenon-135	Ci	LLD	LLD	8.29E-3	1.77E-2
=====					

* - Fourth quarter analyses not available at report time; analyses will be included in the following Semiannual Report.

LLD - Lower Limit of Detection; see Table 2C.

TABLE 2C

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
LIQUID EFFLUENTS - LOWER LIMIT OF DETECTION

RADIONUCLIDES	BATCH MODE LLD ($\mu\text{Ci/ml}$)
barium-140	< 4.29E-6
beryllium-7	< 1.15E-5
cerium-141	< 2.05E-6
cerium-144	< 9.00E-6
cesium-138	< 1.25E-6
iodine-132	< 6.69E-7
iodine-135	< 2.91E-6
niobium-97	< 1.09E-5
rubidium-88	< 1.61E-6
strontium-90	< 5.00E-8
zirconium-95	< 9.39E-7
gross alpha	< 2.50E-8

NOTE: For the report period, there were no releases made by the continuous mode; therefore, no continuous mode LLDs were reported.

TABLE 2D

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
LIQUID EFFLUENT-RADIATION DOSES AT THE SITE BOUNDARY

	Unit	Third Quarter	Fourth Quarter
A. 1. Total body dose	mrem	1.06E-2	2.23E-2
2. Percent Technical Specification Limit	%	3.53E-1	7.43E-1
B. 1. Limiting organ dose	mrem	2.17E-1	3.02E-1
2. Percent Technical Specification Limit	%	2.17E+0	3.02E+0

NOTE: The limiting organ for this reporting period is GI-LLI.

SECTION D RADWASTE SHIPMENTS

TABLE 3

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1983)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Type of Waste	Unit	6-month period	Est. Total Error, %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m ³ Ci	1.11E+1 5.58E+0	3.00E+1
b. Dry compressible waste, contaminated equip., etc.	m ³ Ci	5.14E+1* 1.14E+0	3.00E+1
c. Irradiated components, control rods, etc.	m ³ Ci	0.00E+0 0.00E+0	3.00E+1
d. Other (filters, sludge, sand/rubble, wet trash)	m ³ Ci	6.60E+1** 7.59E-1	3.00E+1

*Material shipped in 55 gal. D.O.T. 7A Type A Drums (7.5 ft³ ea.) and steel boxes (strong tight containers - 98 ft³ ea.)

**Material shipped in 55 gal. D.O.T. 7A Type A Drums (7.5 ft³ ea.)

SECTION D. RADWASTE SHIPMENTS (Continued)

2. Estimate of major nuclide composition (by type of waste)

a. cesium-137	%	1.12E-1
chromium-51	%	1.60E+0
cobalt-57	%	1.26E-3
cobalt-58	%	4.66E+1
cobalt-60	%	2.06E+1
iron-59	%	1.09E+0
manganese-54	%	2.15E+1
niobium-95	%	5.07E+0
zinc-65	%	8.96E-1
zirconium-95	%	2.53E+0
b. cesium-134	%	1.15E+0
cesium-137	%	1.03E+1
cobalt-58	%	4.17E+1
cobalt-60	%	6.36E+0
iron-59	%	2.37E-1
manganese-54	%	4.03E+1
c. Not Applicable	%	0.00E+0
d. beryllium-7	%	2.11E-2
cesium-134	%	9.95E-1
cesium-136	%	1.78E-3
cesium-137	%	7.91E+0
chromium-51	%	2.74E+1
cobalt-58	%	3.24E+1
cobalt-60	%	1.04E+1
iodine-131	%	1.53E+0
iron-59	%	1.54E+0
manganese-54	%	5.09E+0
niobium-95	%	5.39E+0
zirconium-95	%	7.30E+0

A. Solid Waste Shipped Offsite for Burial or Disposal (Continued)

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
6	Truck	Richland, WA

B. Irradiated Fuel Shipments (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None	N/A	N/A

SECTION E. TECHNICAL SPECIFICATION LIMITS

Gaseous Effluents

The percent of Technical Specification Limit, tabulated in Table 1A, was determined by calculation of the following parameter:

$$\% \text{ TSL} = \frac{(\text{Rel Rate})(X/Q)(100)}{\text{MPC}_{\text{eff}}}$$

Where: Rel Rate = total curies released in each category and each quarter, divided by the seconds in a quarter; this is the value in Parts A.2, B.2, C.2 and D.2 of Table 1A divided by 1E6.

X/Q = $2.4\text{E-}5 \text{ sec/M}^3$ and is the annual average atmosphere dispersion defined in the ODCM, Rev. 12.

The MPC_{eff} is defined in the ODCM, Rev. 12 as:

$$\frac{1}{\sum_{i=1}^n \frac{F_i}{\text{MPC}_i}}$$

Where: F_i = fractional abundance of the i th radionuclide obtained by dividing the activity in curies for each radionuclide, C_i , by the sum of all such activities, C_T .

n = total number of radionuclides identified

MPC_i = MPC of the i th radionuclide

The % TSL is placed in Parts A.3, B.3 and C.3 of Table 1A.

Liquid Effluents

The percent of applicable limit, tabulated in Table 2A, was determined by calculation of the following parameter:

$$\% \text{ TSL} = \frac{(\text{Dil Conc})(100)}{\text{MPC}_{\text{eff}}}$$

Where: Dil Conc = total curies released in each category and each quarter, converted to microcuries, divided by the total volume released (sum of Part E and F in Table 2A) converted to milliliters. This number is the value in Part A.2, B.2 and C.2 of Table 2A.

The MPC_{eff} is defined:

$$\frac{1}{\sum_{i=1}^n \frac{F_i}{\text{MPC}_i}}$$

Where: F_i = fractional abundance of the i th radionuclide obtained by dividing the activity in curies for each radionuclide, C_i , by the sum of all such activities, C_T .

n = total number of radionuclides identified

MPC_i = MPC of the i th radionuclide

The % TSL is placed in Parts A.3, B.3 and C.3 of Table 2A.

SECTION F. ESTIMATION OF ERROR

Estimations of the error in reported values of gaseous and liquid effluent releases have been made. Sources of error considered for gaseous effluents - batch releases are: (1) tank volumes, (2) sampling errors, (3) counting errors, and (4) calibration errors. Sources of error for gaseous effluents - continuous releases are: (1) fan flow rate, (2) sampling, (3) counting, (4) calibration and (5) differential pressure drop.

Sources of error for liquid effluents - batch releases are: (1) tank volumes, (2) sampling, (3) counting and (4) calibration. Sources of error for liquid effluents - continuous releases are: (1) dilution water flow rate, (2) sampling, (3) counting and (4) calibration.

These sources of error are independent, and thus the total error is calculated according to the formula:

$$\text{Total Error} = \sqrt{\sigma_1^2 + \sigma_2^2 + \sigma_3^2 + \dots + \sigma_i^2}$$

Where: σ_i = Error associated with each component

SECTION G. METEOROLOGY

The meteorology of the SONGS-2/3 site for the year 1983 is described in this section. Meteorological measurements have been made according to the guidance set forth in USNRC Regulatory Guide 1.23, "Onsite Meteorological Programs." A summary report of the meteorological measurements taken during each calendar quarter are presented in Table 4A as joint frequency distribution (JFD) of wind direction and wind speed by atmospheric stability class.

Hourly meteorological data for batch releases have been recorded for the periods of actual release. This data is available, as well as the hourly data for the Semiannual report, but has not been included in this report because of the bulk of data recorded.

Table 4A lists the joint frequency distribution for the year 1983. Each page of Table 4A represents the data for the Stability Classes: A, B, C, D, E, F, and G; the last page of each table is the JFD with the combined stability classes. Each page is also divided into two parts; the upper part lists the number of hourly periods when each meteorology condition occurred, and the lower part lists the frequency of each classification by percent. The wind speeds have been measured at the 10-meter level, and the stability classes are defined by the temperature differential between the 10- and 40-meter levels.

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS 04B (10-40 METERS)
 WINDS AT 10 METER LEVEL

23-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
SE	0	0	0	0	0	0	0	0	0	1	0	2	3	13 57
SSE	0	0	0	0	0	0	0	3	2	0	0	1	6	8 75
S	0	0	0	2	4	4	2	4	3	1	0	1	23	7 20
SSW	0	0	0	3	2	14	9	5	6	1	0	3	43	6 86
SW	0	0	1	7	13	12	15	9	2	0	3	1	63	6 04
WSW	0	0	0	6	13	13	17	6	3	0	0	0	58	5 75
W	0	0	1	3	13	30	32	24	14	7	10	10	144	7 30
WNW	0	0	0	0	1	3	4	2	11	4	3	4	36	8 79
NW	0	0	0	0	0	0	0	0	0	0	1	0	1	10 60
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
VARIABLE													0	0 00
CALM													0	0 00
TOTAL	0	0	2	21	46	78	81	93	41	14	17	24	377	7 02

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
NE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ENE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
E	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ESE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
SE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 03	0 00	0 10	0 15	13 57
SSE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 13	0 10	0 00	0 00	0 05	0 31	8 75
S	0 00	0 00	0 00	0 10	0 21	0 31	0 10	0 21	0 15	0 05	0 00	0 05	1 18	7 20
SSW	0 00	0 00	0 00	0 13	0 10	0 72	0 46	0 26	0 31	0 05	0 00	0 15	2 21	6 86
SW	0 00	0 00	0 03	0 36	0 67	0 62	0 77	0 46	0 10	0 00	0 15	0 05	3 24	6 04
WSW	0 00	0 00	0 00	0 31	0 67	0 67	0 87	0 31	0 15	0 00	0 00	0 00	2 98	5 75
W	0 00	0 00	0 05	0 13	0 67	1 34	1 64	1 23	0 72	0 36	0 31	0 31	7 40	7 30
WNW	0 00	0 00	0 00	0 00	0 05	0 15	0 31	0 10	0 56	0 21	0 15	0 31	1 85	8 79
NW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 00	0 05	10 60
NNW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
N	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
VARIABLE													0 00	0 00
CALM													0 00	0 00
TOTAL	0 00	0 00	0 10	1 08	2 36	4 01	4 16	2 72	2 11	0 72	0 87	1 23	19 36	7 02

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 17

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-062-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS 886 (10-40 METERS)
 WINDS AT 10 METER LEVEL

29-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11	
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0 00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0 00
E	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0 00
SE	0	0	0	0	0	0	0	0	0	0	1	1	17 70
SSE	0	0	0	0	0	0	1	2	0	0	1	1	8 86
S	0	0	0	1	0	0	1	0	0	0	0	0	5 30
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0 00
SW	0	0	1	1	0	0	0	0	0	0	0	0	3 05
WSW	0	0	0	0	2	0	0	0	0	0	0	0	4 10
W	0	0	0	0	1	0	0	0	0	0	0	0	4 80
WNW	0	0	0	0	0	0	1	2	0	0	0	0	7 13
W	0	0	0	0	0	0	0	0	0	0	0	0	0 00
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0 00
N	0	0	0	0	0	0	0	0	0	0	0	0	0 00
VARIABLE													0 00
CALM													0 00
TOTAL	0	0	1	2	3	0	3	4	0	0	1	2	16 7 07

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11	
NNE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
NE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ENE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
E	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ESE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
SE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	17 70
SSE	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 10	0 00	0 00	0 05	0 05	8 86
S	0 00	0 00	0 00	0 05	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	5 30
SSW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
SW	0 00	0 00	0 05	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	3 05
WSW	0 00	0 00	0 00	0 00	0 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	4 10
W	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	4 80
WNW	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 10	0 00	0 00	0 00	0 00	7 13
W	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
NNW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
N	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
VARIABLE													0 00
CALM													0 00
TOTAL	0 00	0 00	0 05	0 10	0 15	0 00	0 15	0 21	0 00	0 00	0 05	0 10	16 7 07

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-092-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS 0C8 (10-40 METERS)
 WINDS AT 10 METER LEVEL

28-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
NE	0	0	0	0	0	0	0	0	0	0	0	1	1	11 80
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ESE	0	0	0	0	0	0	0	0	0	0	0	2	2	16 95
SE	0	0	0	0	0	1	0	0	1	0	0	1	3	12 57
SSE	0	0	0	0	0	2	1	1	0	2	3	3	12	9 81
S	0	0	1	2	0	1	0	2	1	1	0	0	8	6 09
SSW	0	0	0	1	0	0	0	1	0	0	0	0	2	5 40
SW	0	0	1	0	0	1	1	2	1	0	0	1	8	7 03
WSW	0	1	2	0	2	3	1	0	1	0	0	1	11	5 72
W	0	0	0	1	1	2	0	0	1	0	0	4	9	9 80
WNW	0	0	0	1	1	2	1	2	1	0	9	2	10	7 44
NW	0	0	0	0	0	0	2	1	0	0	0	0	3	7 07
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
VARIABLE													0	0 00
CALM													0	0 00
TOTAL	0	1	9	9	4	12	6	9	6	3	3	15	69	8 17

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
NE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 03	0 03	11 80
ENE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
E	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ESE	0 00	0 00	0 00	0 30	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 10	0 10	16 95
SE	0 00	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 05	0 00	0 00	0 05	0 15	12 57
SSE	0 00	0 00	0 00	0 00	0 00	0 10	0 05	0 05	0 00	0 10	0 15	0 15	0 62	9 81
S	0 00	0 00	0 05	0 10	0 00	0 05	0 00	0 10	0 05	0 05	0 00	0 00	0 41	6 09
SSW	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 10	5 40
SW	0 00	0 00	0 10	0 00	0 00	0 05	0 05	0 10	0 05	0 00	0 00	0 05	0 41	7 03
WSW	0 00	0 03	0 10	0 00	0 10	0 15	0 05	0 00	0 05	0 00	0 00	0 05	0 36	5 72
W	0 00	0 00	0 00	0 05	0 05	0 10	0 00	0 00	0 05	0 00	0 00	0 21	0 46	9 80
WNW	0 00	0 00	0 00	0 05	0 05	0 10	0 05	0 10	0 05	0 00	0 00	0 10	0 31	7 44
NW	0 00	0 00	0 00	0 00	0 00	0 00	0 10	0 05	0 00	0 00	0 00	0 00	0 15	7 07
NNW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
N	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
VARIABLE													0 00	0 00
CALM													0 00	0 00
TOTAL	0 00	0 03	0 26	0 26	0 21	0 62	0 31	0 46	0 31	0 15	0 15	0 77	3 54	8 17

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS 808 (10-40 METERS)
 WINDS AT 10 METER LEVEL

23-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11	
NNE	0	1	2	1	3	1	0	0	0	0	0	10	3.83
NE	0	1	0	0	0	0	0	0	0	0	0	3	9.60
ENE	0	0	0	0	0	0	0	1	0	0	0	1	7.80
E	0	0	0	0	1	1	0	0	0	0	1	3	6.63
ESE	0	1	1	0	0	4	4	0	2	2	1	12	10.87
SE	0	0	1	0	2	3	5	7	7	9	4	22	10.85
SSE	0	0	1	3	2	2	10	1	1	1	2	26	10.95
S	0	0	1	4	3	2	4	2	2	0	0	27	12.13
SSW	0	0	0	4	1	1	4	2	1	1	0	15	11.17
SW	0	0	3	3	3	3	2	1	1	1	2	13	10.20
WSW	0	2	0	2	3	7	3	3	2	0	2	13	8.70
W	0	0	4	11	2	3	2	1	1	3	2	19	9.88
WNW	0	0	1	3	4	3	1	2	3	2	3	28	7.78
NW	0	1	0	2	3	7	4	2	4	3	0	36	7.41
NNW	0	0	0	1	3	2	1	2	0	1	0	12	7.65
N	0	0	1	1	1	1	2	0	0	0	0	6	4.77
VARIABLE												0	0.00
CALM												0	0.00
TOTAL	0	6	15	41	37	44	47	26	26	21	16	162	9.80

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11	
NNE	0.00	0.05	0.10	0.05	0.26	0.05	0.00	0.00	0.00	0.00	0.00	0.00	3.83
NE	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	9.60
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	7.80
E	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.05	0.00	6.63
ESE	0.00	0.05	0.05	0.00	0.00	0.21	0.21	0.00	0.10	0.10	0.05	0.62	10.87
SE	0.00	0.00	0.05	0.00	0.10	0.26	0.41	0.36	0.36	0.26	0.21	1.13	10.85
SSE	0.00	0.00	0.05	0.26	0.10	0.10	0.31	0.05	0.05	0.05	0.10	1.34	10.95
S	0.00	0.00	0.05	0.21	0.15	0.10	0.21	0.10	0.10	0.00	0.00	1.39	12.13
SSW	0.00	0.00	0.00	0.31	0.05	0.05	0.21	0.10	0.05	0.05	0.00	0.77	11.17
SW	0.00	0.00	0.15	0.26	0.15	0.15	0.10	0.05	0.05	0.05	0.10	0.67	10.20
WSW	0.00	0.10	0.00	0.10	0.26	0.36	0.26	0.26	0.10	0.00	0.10	0.67	8.70
W	0.00	0.00	0.21	0.36	0.10	0.26	0.10	0.05	0.05	0.15	0.10	0.98	9.88
WNW	0.00	0.00	0.05	0.15	0.21	0.15	0.05	0.10	0.26	0.10	0.10	0.26	7.78
NW	0.00	0.05	0.00	0.10	0.26	0.36	0.21	0.10	0.21	0.26	0.00	0.31	7.41
NNW	0.00	0.00	0.00	0.05	0.15	0.10	0.05	0.10	0.00	0.05	0.00	0.10	7.65
N	0.00	0.00	0.05	0.05	0.05	0.05	0.10	0.00	0.00	0.00	0.00	0.00	4.77
VARIABLE												0.00	0.00
CALM												0.00	0.00
TOTAL	0.00	0.31	0.77	2.11	1.90	2.26	2.41	1.34	1.34	1.08	0.82	8.32	9.80

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS 060 (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	3	4	11	8	7	15	4	2	0	0	0	54	5 10
NE	0	0	2	2	3	0	0	0	0	0	0	1	8	5 00
ENE	0	1	1	2	2	3	0	0	0	0	0	3	12	6 82
E	0	0	3	5	0	1	0	2	0	0	0	0	11	4 35
ESE	0	0	1	2	2	2	0	1	0	0	0	1	9	6 81
SE	0	0	1	5	3	5	2	1	2	0	1	17	37	10 36
SSE	0	1	3	2	2	3	0	1	1	0	0	10	23	15 19
S	0	0	1	2	2	0	0	0	1	0	0	3	9	10 24
SSW	0	0	2	1	1	1	1	0	0	0	0	0	6	4 40
SW	0	1	3	3	2	0	1	1	0	1	0	3	15	8 52
WSW	0	0	0	3	0	0	1	1	0	0	0	0	5	4 84
W	0	0	4	1	2	3	1	4	2	0	2	11	30	8 94
WNW	0	0	2	4	0	1	3	5	3	3	1	8	30	8 48
NW	0	0	0	0	2	5	3	3	3	0	0	2	18	7 16
NNW	0	0	3	3	5	0	1	1	0	0	0	0	13	4 18
N	0	2	6	8	4	4	4	3	1	0	0	0	32	4 52
VARIABLE													0	0 00
CALM													0	0 00
TOTAL	0	8	36	54	38	35	32	27	15	4	4	39	312	7 56

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0 00	0 19	0 21	0 36	0 41	0 36	0 77	0 21	0 10	0 00	0 00	0 00	2 77	5 10
NE	0 00	0 00	0 10	0 10	0 15	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 41	5 00
ENE	0 00	0 05	0 05	0 10	0 10	0 15	0 00	0 00	0 00	0 00	0 00	0 15	0 62	6 82
E	0 00	0 00	0 15	0 26	0 00	0 05	0 00	0 10	0 00	0 00	0 00	0 00	0 36	4 35
ESE	0 00	0 00	0 05	0 10	0 10	0 10	0 00	0 05	0 00	0 00	0 00	0 05	0 46	6 81
SE	0 00	0 00	0 05	0 26	0 15	0 26	0 10	0 05	0 10	0 00	0 05	0 87	1 90	10 36
SSE	0 00	0 05	0 15	0 10	0 10	0 15	0 00	0 05	0 05	0 00	0 00	0 31	1 18	15 19
S	0 00	0 00	0 05	0 10	0 10	0 00	0 00	0 00	0 05	0 00	0 00	0 15	0 46	10 24
SSW	0 00	0 00	0 10	0 05	0 05	0 05	0 05	0 00	0 00	0 00	0 00	0 00	0 31	4 40
SW	0 00	0 05	0 15	0 15	0 10	0 00	0 05	0 05	0 00	0 05	0 00	0 15	0 77	8 52
WSW	0 00	0 00	0 00	0 15	0 00	0 00	0 05	0 05	0 00	0 00	0 00	0 00	0 26	4 84
W	0 00	0 00	0 21	0 05	0 10	0 15	0 05	0 21	0 10	0 00	0 10	0 36	1 34	8 94
WNW	0 00	0 00	0 10	0 21	0 00	0 05	0 15	0 26	0 15	0 15	0 05	0 41	1 34	8 48
NW	0 00	0 00	0 00	0 00	0 10	0 26	0 15	0 15	0 15	0 00	0 00	0 10	0 92	7 16
NNW	0 00	0 00	0 15	0 15	0 26	0 00	0 05	0 05	0 00	0 00	0 00	0 00	0 67	4 18
N	0 00	0 10	0 31	0 41	0 21	0 21	0 21	0 15	0 05	0 00	0 00	0 00	1 64	4 52
VARIABLE													0 00	0 00
CALM													0 00	0 00
TOTAL	0 00	0 41	1 85	2 77	1 95	1 80	1 64	1 39	0 77	0 21	0 21	3 03	16 02	7 56

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 12T QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-04
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS BFB (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	1	4	14	25	39	19	13	6	7	1	1	130	5.64
NE	0	0	5	16	10	2	0	1	1	0	0	0	35	4.15
ENE	0	2	3	1	4	0	0	0	1	0	0	0	12	4.48
E	0	0	3	1	0	1	0	0	0	0	0	0	5	3.22
ESE	0	0	1	0	0	0	0	0	0	0	0	0	1	2.60
SE	0	0	2	2	5	4	5	1	0	1	1	0	21	5.51
SSE	0	0	4	4	3	2	0	0	0	0	0	0	13	3.85
S	0	0	0	5	2	1	0	0	0	0	0	0	8	3.96
SSW	0	0	0	0	3	0	1	1	1	0	0	0	6	6.07
SW	0	0	0	0	0	0	1	0	1	0	0	0	2	7.75
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
W	0	0	1	0	2	0	0	0	0	0	0	0	3	3.97
WNW	0	0	2	2	2	0	0	0	0	0	0	0	6	3.75
NW	0	0	0	1	1	1	0	0	0	0	0	0	3	4.27
NNW	0	0	1	2	0	0	0	1	2	0	0	0	6	5.72
N	0	0	0	4	5	6	3	4	1	1	0	0	24	5.75
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	3	26	52	62	56	29	21	13	9	3	1	275	5.26

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.03	0.21	0.72	1.28	2.00	0.98	0.67	0.31	0.36	0.03	0.03	6.68	5.64
NE	0.00	0.00	0.26	0.82	0.31	0.10	0.00	0.03	0.03	0.00	0.00	0.00	1.80	4.15
ENE	0.00	0.10	0.15	0.03	0.21	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.62	4.48
E	0.00	0.00	0.13	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.26	3.22
ESE	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	2.60
SE	0.00	0.00	0.10	0.10	0.26	0.21	0.26	0.03	0.00	0.03	0.03	0.00	1.08	5.51
SSE	0.00	0.00	0.21	0.21	0.13	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.67	3.85
S	0.00	0.00	0.00	0.26	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.41	3.96
SSW	0.00	0.00	0.00	0.00	0.15	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.31	6.07
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.10	7.75
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W	0.00	0.00	0.03	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	3.97
WNW	0.00	0.00	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	3.75
NW	0.00	0.00	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.15	4.27
NNW	0.00	0.00	0.03	0.10	0.00	0.03	0.00	0.03	0.10	0.00	0.00	0.00	0.31	5.72
N	0.00	0.00	0.00	0.21	0.26	0.31	0.13	0.21	0.03	0.03	0.00	0.00	1.23	5.75
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.15	1.34	2.67	3.18	2.88	1.49	1.08	0.67	0.46	0.15	0.03	14.12	5.26

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS 808 (10-40 METERS)
 WINDS AT 10 METER LEVEL

29-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	1	3	8	18	39	44	34	32	34	29	282	8.48
NE	0	0	1	4	3	3	4	1	1	1	0	1	19	5.85
ENE	0	0	0	1	0	2	0	0	0	0	0	0	3	5.03
E	0	0	0	1	0	0	0	0	0	0	0	0	1	4.00
ESE	0	2	2	1	0	0	0	0	0	0	0	0	5	2.52
SE	1	0	0	1	3	4	16	18	13	4	1	0	61	7.32
SSE	0	1	1	1	2	1	0	3	0	1	1	1	12	6.42
S	0	0	0	0	0	0	1	0	4	0	2	1	8	9.09
SSW	0	0	0	0	1	1	1	3	3	7	6	0	24	8.88
SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	2	0	0	0	0	0	0	0	2	4.43
W	0	0	0	0	0	1	0	2	0	0	0	0	3	6.87
WNW	0	1	0	1	2	2	0	0	2	0	0	0	8	5.39
NW	0	0	0	0	0	1	1	0	0	0	0	0	2	5.95
NNW	0	0	0	0	1	0	1	0	1	0	0	0	3	6.67
N	0	0	0	0	1	1	5	7	1	6	2	1	24	8.08
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	1	4	9	19	23	34	68	82	79	71	46	29	437	7.97

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.03	0.26	0.41	0.92	2.00	2.36	2.77	2.67	1.75	1.28	14.48	8.48
NE	0.00	0.00	0.03	0.21	0.13	0.13	0.21	0.03	0.09	0.03	0.00	0.03	0.98	5.85
ENE	0.00	0.00	0.00	0.03	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.15	5.03
E	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	4.00
ESE	0.00	0.10	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	2.52
SE	0.03	0.00	0.00	0.03	0.13	0.21	0.82	0.92	0.67	0.21	0.03	0.00	3.13	7.32
SSE	0.00	0.03	0.03	0.03	0.10	0.03	0.00	0.15	0.00	0.03	0.03	0.03	0.62	6.42
S	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.21	0.00	0.10	0.03	0.41	9.09
SSW	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.24	0.15	0.36	0.31	0.00	1.23	8.88
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	4.43
W	0.00	0.03	0.00	0.03	0.10	0.10	0.00	0.00	0.10	0.00	0.00	0.00	0.41	5.39
WNW	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00	0.03	0.00	0.00	0.00	0.10	5.95
NW	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.15	6.67
NNW	0.00	0.00	0.00	0.00	0.03	0.03	0.26	0.36	0.03	0.31	0.10	0.03	1.23	8.08
N	0.00	0.00	0.00	0.00	0.03	0.03	0.26	0.36	0.03	0.31	0.10	0.03	0.00	0.00
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.03	0.21	0.26	0.77	1.18	1.75	3.49	4.21	4.06	3.63	2.36	1.49	23.47	7.97

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 1ST QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 01/01/83 TO 03/31/83
 STABILITY CLASS ALL (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.	9.	11.	32	49.	66	73.	63	62	99	39	26	481	7.25
NE	0.	1.	8.	22.	17.	9	4.	2.	2	1.	0.	5	67	5.10
ENE	0.	3.	4.	4.	7.	9	0.	1.	1.	0.	1.	3	29	5.63
E	0.	0.	6.	7.	1.	3	0.	2.	0.	0.	1.	0	20	4.37
ESE	0.	3.	9.	3.	2	6	6	1.	2.	2	1.	15	46	9.06
SE	1.	0.	4.	10.	13	21	32	28	23	12	7	43	194	9.00
SSE	0.	2.	9.	13.	10.	12	12	11.	4	4	7	42	126	10.08
S	0.	0.	3	17.	11.	10	8.	10.	13	2	2	32	108	9.28
SSW	0.	0.	2	12.	8	17	14	14	11.	9	6	18	113	8.24
SW	0.	1.	11.	16.	19.	17.	20.	12	9.	2	3	18	127	7.44
WSW	0.	3.	2	11.	26	24	24	12.	6.	0.	2	14	124	6.66
W	0.	0.	10.	16.	21.	41.	35	31.	18	10	14	44	240	8.08
WNW	0.	1.	9	11.	10	11.	12	13	22	9	6	21.	121	7.85
NW	0.	1.	0	3.	8	14	10.	6.	7.	9	1.	8	63	7.17
NNW	0.	0.	4.	6.	9.	2	3.	4.	3.	1.	0.	2	34	5.90
N	0.	2.	7.	13	11.	12	14.	14.	3.	7.	2	1.	86	5.88
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	1.	22.	91.	196	222	266	269.	229.	182	123	90.	292	1979	7.71

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.35	0.56	1.62	2.48	3.34	3.69	3.18	3.13	2.98	1.77	1.31	24.31	7.25
NE	0.00	0.05	0.40	1.11	0.86	0.25	0.20	0.10	0.10	0.05	0.00	0.25	3.39	5.10
ENE	0.00	0.15	0.20	0.20	0.35	0.25	0.00	0.05	0.05	0.00	0.05	0.15	1.47	5.63
E	0.00	0.00	0.30	0.35	0.05	0.15	0.00	0.10	0.00	0.00	0.05	0.00	1.01	4.39
ESE	0.00	0.15	0.25	0.15	0.10	0.30	0.30	0.05	0.10	0.10	0.05	0.76	2.32	9.06
SE	0.05	0.00	0.20	0.31	0.66	1.06	1.62	1.25	1.16	0.61	0.35	2.17	9.80	9.00
SSE	0.00	0.10	0.45	0.66	0.51	0.61	0.61	0.36	0.20	0.20	0.35	2.12	6.37	10.08
S	0.00	0.00	0.15	0.86	0.56	0.51	0.40	0.51	0.66	0.10	0.10	1.62	5.46	9.28
SSW	0.00	0.00	0.10	0.41	0.40	0.86	0.81	0.71	0.56	0.45	0.30	0.91	5.71	8.24
SW	0.00	0.05	0.56	0.81	0.96	0.86	1.01	0.66	0.25	0.10	0.25	0.91	6.42	7.44
WSW	0.00	0.15	0.10	0.56	1.31	1.21	1.21	0.61	0.30	0.00	0.10	0.71	6.27	6.66
W	0.00	0.00	0.51	0.81	1.06	2.07	1.77	1.37	0.91	0.51	0.71	2.22	12.13	8.08
WNW	0.00	0.05	0.25	0.56	0.51	0.56	0.61	0.66	1.11	0.45	0.30	1.06	6.11	7.85
NW	0.00	0.05	0.00	0.15	0.40	0.71	0.51	0.30	0.35	0.25	0.05	0.40	3.18	7.17
NNW	0.00	0.00	0.20	0.30	0.45	0.10	0.15	0.20	0.15	0.05	0.00	0.10	1.72	5.90
N	0.00	0.10	0.35	0.66	0.56	0.61	0.71	0.71	0.15	0.35	0.10	0.05	4.35	5.88
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.05	1.11	4.60	9.90	11.22	13.66	13.99	11.37	9.20	6.22	4.99	14.75	100.00	7.71

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 3160

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 1947

TABLE 4A

SOUTHERN CALIFORNIA EDISON CO'S-AY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS B4B (10-40 METERS)
 WINDS AT 10 METER LEVEL

29-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	1	0	0	1	0	0	0	2	7.35
SE	0	0	0	0	0	0	0	0	1	0	0	1	2	11.25
SSE	0	0	0	0	0	1	2	3	4	4	9	12	31	9.98
S	0	0	0	1	3	3	11	13	7	14	7	7	66	8.55
SSW	0	0	1	4	12	13	17	24	21	12	8	2	114	7.37
SW	0	0	0	2	16	22	34	29	22	7	3	2	137	6.99
WSW	0	0	0	1	6	18	33	48	35	16	4	7	168	7.65
W	1	0	0	0	8	23	30	37	49	29	2	14	193	8.17
WNW	0	0	0	0	2	3	10	9	9	9	4	2	44	7.89
NW	0	0	0	0	1	0	0	0	0	0	1	0	2	7.75
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
VARIABLE													0	0.00
CALM													1	0.20
TOTAL	1	0	1	8	48	84	137	163	149	87	34	47	760	7.81

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.09	7.35
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.09	11.25
SSE	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.14	0.18	0.18	0.23	0.35	1.43	9.98
S	0.00	0.00	0.00	0.05	0.14	0.14	0.31	0.60	0.32	0.65	0.32	0.37	3.04	8.55
SSW	0.00	0.00	0.05	0.18	0.35	0.60	0.78	1.11	0.97	0.55	0.37	0.0	5.25	7.37
SW	0.00	0.00	0.00	0.09	0.74	1.01	1.57	1.34	1.01	0.32	0.14	0.09	6.31	6.99
WSW	0.00	0.00	0.00	0.05	0.28	0.83	1.52	2.21	1.61	0.74	0.18	0.32	7.74	7.65
W	0.05	0.00	0.00	0.00	0.37	1.04	1.38	1.71	2.26	1.34	0.09	0.65	8.89	8.17
WNW	0.00	0.00	0.00	0.00	0.09	0.14	0.44	0.41	0.41	0.23	0.18	0.09	2.03	7.89
NW	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.09	7.75
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE													0.00	0.00
CALM													0.05	0.20
TOTAL	0.05	0.00	0.05	0.37	2.21	3.87	6.31	7.91	6.87	4.01	1.97	2.17	35.02	7.81

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVIS AND MOORE JOB NO. - 00377-082-00
 DATA PERIOD- 04/01/83 TO 04/30/83
 STABILITY CLASS 688 (10-40 METERS)
 WINDS AT 10 METER LEVEL

29-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	0	0	0	1	0	0	0	0	0	0	1	5.40
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0	0	1	0	1	2	11.35
SSE	0	0	0	0	0	1	0	0	3	1	2	0	7	8.87
S	0	0	0	0	2	0	1	2	1	0	0	3	9	8.96
SSW	0	0	1	1	0	0	0	0	0	0	1	0	3	5.60
SW	0	0	0	2	2	2	0	0	0	0	0	0	6	4.57
WSW	0	0	0	2	0	1	0	1	0	0	0	0	4	5.03
W	0	0	0	2	3	1	0	2	0	0	1	2	11	6.91
WNW	0	0	0	0	2	2	2	0	1	0	0	0	7	5.87
NW	0	0	0	0	1	0	0	0	0	0	0	0	1	4.90
NNW	0	0	0	0	0	1	0	0	0	0	0	0	1	5.20
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	0	1	7	10	9	3	8	8	2	4	6	52	6.97

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	5.40
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.09	11.35
SSE	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.14	0.05	0.09	0.00	0.32	8.87
S	0.00	0.00	0.00	0.00	0.09	0.00	0.05	0.09	0.05	0.00	0.00	0.14	0.41	8.96
SSW	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	5.60
SW	0.00	0.00	0.00	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.28	4.57
WSW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.18	5.03
W	0.00	0.00	0.00	0.09	0.14	0.05	0.00	0.09	0.10	0.00	0.05	0.09	0.51	6.91
WNW	0.00	0.00	0.00	0.00	0.09	0.09	0.09	0.00	0.05	0.00	0.00	0.00	0.32	5.87
NW	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	4.90
NNW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	5.20
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.05	0.32	0.46	0.41	0.14	0.23	0.23	0.09	0.18	0.28	2.40	6.97

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS BCS (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
SE	0	0	0	0	0	0	1	1	0	0	1	0	3	8 30
SSE	0	0	0	0	1	0	1	2	2	0	1	2	9	9 20
S	0	0	0	1	0	1	2	0	1	0	0	2	7	8 30
SSW	0	0	0	1	1	3	1	2	1	0	0	1	10	7 08
SW	0	0	0	2	3	1	2	0	0	0	0	0	8	4 86
WSW	0	0	0	2	1	0	0	1	3	2	0	1	10	7 46
W	0	0	0	2	3	3	1	2	0	0	0	1	12	6 36
WNW	0	0	0	2	4	1	2	2	1	0	0	0	13	5 51
NW	0	0	0	0	2	0	0	0	0	1	0	0	3	6 43
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
N	0	0	0	1	1	1	0	0	0	0	0	0	3	4 33
VARIABLE													0	0 00
CALM													0	0 00
TOTAL	0	0	0	12	16	10	10	10	8	3	2	7	78	6 80

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.05	0.00	0.14	8 30
SSE	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.09	0.09	0.00	0.05	0.09	0.41	9 20
S	0.00	0.00	0.00	0.05	0.00	0.05	0.09	0.00	0.05	0.00	0.00	0.09	0.32	8 30
SSW	0.00	0.00	0.00	0.05	0.05	0.14	0.05	0.09	0.05	0.00	0.00	0.05	0.46	7 08
SW	0.00	0.00	0.00	0.09	0.14	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.37	4 86
WSW	0.00	0.00	0.00	0.09	0.05	0.00	0.00	0.05	0.14	0.09	0.00	0.05	0.46	7 46
W	0.00	0.00	0.00	0.09	0.14	0.14	0.05	0.09	0.00	0.00	0.00	0.05	0.55	6 36
WNW	0.00	0.00	0.00	0.14	0.18	0.05	0.09	0.09	0.05	0.00	0.00	0.00	0.60	5 51
NW	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.14	6 43
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00
N	0.00	0.00	0.00	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	4 33
VARIABLE													0.00	0 00
CALM													0.00	0 00
TOTAL	0.00	0.00	0.00	0.55	0.74	0.46	0.46	0.46	0.37	0.14	0.09	0.32	3.59	6 80

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN DIEGO NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS B06 (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	7	14	15	11	9	9	0	0	0	0	57	4.72
NE	0	0	2	1	3	4	0	0	0	0	0	0	10	4.45
ENE	0	0	2	4	3	2	0	0	0	0	0	0	11	4.05
E	0	0	1	2	3	7	8	0	0	0	0	0	21	5.49
ESE	0	0	0	3	11	9	7	8	0	0	1	3	42	6.38
SE	0	0	0	2	14	18	14	18	10	12	4	6	102	7.25
SSE	0	0	2	11	14	23	15	11	9	7	7	14	111	7.39
S	0	1	4	10	21	13	13	9	6	0	1	6	84	6.04
SSW	0	1	2	9	8	9	13	7	3	2	2	6	48	6.90
SW	0	0	4	3	4	4	10	4	3	1	2	2	4	6.15
WSW	0	1	9	10	3	5	5	6	2	0	2	4	6	6.07
W	0	0	9	17	4	3	3	3	1	1	0	7	50	5.62
WNW	0	0	8	14	10	4	9	1	9	3	1	2	54	5.68
NW	0	0	4	11	9	4	6	2	1	3	3	1	42	5.58
NNW	0	0	1	7	4	4	0	3	0	0	0	0	19	4.66
N	0	0	4	12	4	2	2	0	0	0	0	0	24	3.95
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	3	54	126	130	124	108	79	40	29	23	53	771	6.15

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.32	0.65	0.64	0.91	0.23	0.23	0.00	0.00	0.00	0.00	2.63	4.72
NE	0.00	0.00	0.09	0.05	0.14	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.46	4.45
ENE	0.00	0.00	0.09	0.18	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.51	4.05
E	0.00	0.00	0.05	0.09	0.14	0.32	0.37	0.00	0.00	0.00	0.00	0.00	0.97	5.49
ESE	0.00	0.00	0.00	0.14	0.51	0.41	0.32	0.37	0.00	0.00	0.03	0.14	1.94	6.38
SE	0.00	0.00	0.00	0.09	0.74	0.83	0.74	0.83	0.46	0.55	0.18	0.26	4.70	7.25
SSE	0.00	0.00	0.09	0.51	0.65	1.06	0.69	0.51	0.23	0.32	0.32	0.74	5.12	7.39
S	0.00	0.05	0.19	0.46	0.97	0.60	0.60	0.41	0.29	0.00	0.05	0.28	3.87	6.04
SSW	0.00	0.05	0.09	0.23	0.37	0.41	0.60	0.32	0.14	0.09	0.09	0.28	2.67	6.90
SW	0.00	0.00	0.26	0.14	0.28	0.28	0.46	0.18	0.14	0.05	0.09	0.09	1.98	6.15
WSW	0.00	0.05	0.23	0.46	0.14	0.23	0.23	0.28	0.09	0.00	0.09	0.18	1.98	6.07
W	0.00	0.00	0.41	0.78	0.18	0.14	0.14	0.23	0.05	0.05	0.00	0.32	2.30	5.62
WNW	0.00	0.00	0.23	0.65	0.46	0.18	0.23	0.05	0.41	0.14	0.05	0.09	2.49	5.68
NW	0.00	0.00	0.28	0.51	0.22	0.18	0.28	0.09	0.05	0.14	0.14	0.05	1.94	5.58
NNW	0.00	0.00	0.05	0.32	0.18	0.18	0.00	0.14	0.00	0.00	0.00	0.00	0.88	4.66
N	0.00	0.00	0.18	0.55	0.18	0.09	0.09	0.00	0.00	0.00	0.00	0.00	1.11	3.95
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.14	2.58	5.81	5.99	5.71	4.98	3.64	1.84	1.34	1.06	2.44	35.53	6.15

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVIS AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS 060 (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	7	20	7	13	10	6	3	1	0	0	67	5.10
NE	0	0	0	1	1	1	0	0	0	0	0	0	3	4.50
ENE	0	0	1	3	2	0	0	0	0	0	0	0	6	3.70
E	0	0	2	3	1	1	2	0	0	0	0	0	9	4.32
ESE	0	0	1	0	3	4	2	0	0	0	0	0	10	5.06
SE	0	0	0	3	1	5	2	1	0	0	0	0	12	5.32
SSE	0	0	2	0	1	0	0	1	0	0	0	1	5	7.32
S	0	0	3	1	0	1	0	0	0	0	0	0	5	3.72
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SW	0	1	2	3	0	0	0	0	1	0	0	0	7	3.63
WSW	0	0	0	0	1	0	0	1	1	1	0	0	4	7.73
W	0	0	0	0	0	1	0	0	0	0	0	1	2	8.73
WNW	0	0	0	0	1	0	2	1	0	1	1	0	6	7.60
NW	0	2	0	1	1	1	3	1	1	1	1	1	13	6.45
NNW	0	1	0	1	0	2	4	0	0	1	0	0	9	5.62
N	0	0	4	7	5	9	2	3	0	0	0	0	30	4.75
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	4	22	43	24	38	27	14	6	5	2	3	188	5.23

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.32	0.92	0.32	0.60	0.46	0.28	0.14	0.05	0.00	0.00	3.09	5.10
NE	0.00	0.00	0.00	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	4.50
ENE	0.00	0.00	0.05	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	3.70
E	0.00	0.00	0.09	0.14	0.05	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.41	4.32
ESE	0.00	0.00	0.05	0.00	0.14	0.18	0.09	0.00	0.00	0.00	0.00	0.00	0.46	5.06
SE	0.00	0.00	0.00	0.14	0.05	0.23	0.09	0.05	0.00	0.00	0.00	0.00	0.55	5.32
SSE	0.00	0.00	0.09	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.23	7.32
S	0.00	0.00	0.14	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.23	3.72
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW	0.00	0.05	0.09	0.14	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.32	3.63
WSW	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.05	0.05	0.00	0.00	0.18	7.73
W	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.05	0.09	8.73
WNW	0.00	0.00	0.00	0.00	0.05	0.00	0.09	0.05	0.00	0.05	0.05	0.00	0.28	7.60
NW	0.00	0.09	0.00	0.05	0.05	0.05	0.14	0.05	0.05	0.05	0.05	0.05	0.60	6.45
NNW	0.00	0.05	0.00	0.05	0.00	0.09	0.18	0.00	0.00	0.05	0.00	0.00	0.41	5.62
N	0.00	0.00	0.18	0.32	0.23	0.41	0.09	0.14	0.00	0.00	0.00	0.00	1.38	4.75
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.18	1.01	1.98	1.11	1.75	1.24	0.65	0.28	0.23	0.09	0.14	8.64	5.23

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVIS AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS 6F8 (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.	0.	2.	12.	20.	26.	22.	11.	9.	0.	0.	0.	98	5.70
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0	0.00
ENE	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	2	3.50
E	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1	2.80
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0	0.00
SE	0.	0.	0.	1.	1.	3.	3.	0.	0.	1.	0.	0.	11	6.15
SSE	0.	0.	2.	2.	1.	1.	3.	1.	3.	0.	0.	0.	13	5.75
S	0.	0.	0.	1.	0.	3.	0.	0.	0.	0.	0.	0.	4	5.23
SSW	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	1	5.50
SW	0.	0.	0.	2.	0.	0.	0.	1.	0.	0.	0.	0.	3	5.07
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0	0.00
W	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	1	4.90
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0	0.00
NW	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	1	7.60
NNW	0.	0.	0.	0.	1.	0.	1.	0.	0.	0.	0.	0.	2	5.90
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0	0.00
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0.	0.	9	20.	24.	36.	29.	14.	8.	1.	0.	0.	137	5.67

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.09	0.33	0.92	1.20	1.01	0.31	0.23	0.00	0.00	0.00	4.52	5.70
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.50
E	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	2.80
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.00	0.03	0.03	0.23	0.14	0.00	0.00	0.03	0.00	0.00	0.51	6.15
SSE	0.00	0.00	0.09	0.09	0.03	0.03	0.14	0.03	0.14	0.00	0.00	0.00	0.60	5.75
S	0.00	0.00	0.00	0.03	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.18	5.23
SSW	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	5.50
SW	0.00	0.07	0.00	0.09	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.14	5.07
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	4.90
WNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	7.60
NNW	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.09	5.90
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.23	0.92	1.11	1.66	1.34	0.63	0.37	0.03	0.00	0.00	6.31	5.67

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVIS AND MOORE JOB NO. - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS 908 (10-40 METERS)
 WINDS AT 10 METER LEVEL

29-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11			>11
NNE	0	0	0	0	3	7	31	42	30	23	7	1	144	7.86
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
NNE	0	0	0	1	0	0	0	0	0	0	0	0	1	3.80
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SE	0	0	1	0	0	0	2	0	2	1	0	2	8	8.93
SSE	0	0	1	2	1	1	1	1	2	4	0	1	15	7.57
S	0	0	1	0	0	0	1	0	1	0	0	0	3	6.13
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	1	0	0	0	0	0	0	0	1	4.70
W	0	0	0	1	0	1	0	0	0	0	0	0	2	4.75
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1	6.70
NW	0	0	0	1	0	0	0	0	0	0	0	0	1	4.00
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
VARIABLE	0	0	0	0	0	0	2	1	2	3	0	0	8	8.39
CALM													0	0.00
TOTAL	0	0	3	3	3	9	38	44	38	31	7	4	184	7.78

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.00	0.00	0.14	0.32	1.43	1.94	1.38	1.06	0.32	0.05	6.64	7.86
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NNE	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.80
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.03	0.00	0.00	0.00	0.09	0.00	0.09	0.05	0.00	0.09	0.37	8.93
SSE	0.00	0.00	0.03	0.09	0.03	0.03	0.03	0.03	0.14	0.18	0.00	0.03	0.69	7.57
S	0.00	0.00	0.03	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.14	6.13
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	4.70
W	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	4.75
WNW	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.03	6.70
NW	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	4.00
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.03	0.09	0.14	0.00	0.00	0.37	8.39
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.14	0.23	0.23	0.41	1.79	2.03	1.79	1.43	0.32	0.18	8.48	7.78

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 2ND QUARTER, 1983
 DAVES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 04/01/83 TO 06/30/83
 STABILITY CLASS ALL (10-40 METERS)
 WINDS AT 10 METER LEVEL

25-JUL-83

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11			>11
NNE	0.	0.	14.	44.	45.	58.	68.	64.	38.	24.	7.	1.	367	6.29
NE	0.	0.	2.	2.	4.	5.	0.	0.	0.	0.	0.	0.	13	4.46
ENE	0.	0.	3.	10.	9.	2.	0.	0.	0.	0.	0.	0.	20	3.88
E	0.	0.	4.	9.	4.	8.	10.	0.	0.	0.	0.	0.	31	5.06
ESE	0.	0.	1.	3.	14.	14.	9.	8.	1.	0.	1.	3.	54	6.17
SE	0.	0.	1.	4.	18.	28.	24.	20.	13.	13.	9.	10.	140	7.23
SSE	0.	0.	7.	19.	18.	27.	22.	19.	20.	14.	19.	32.	191	7.85
S	0.	1.	8.	14.	24.	21.	29.	24.	14.	14.	8.	18.	178	7.13
SSW	0.	1.	4.	11.	21.	24.	31.	33.	25.	14.	11.	9.	186	7.17
SW	0.	1.	8.	14.	27.	31.	44.	34.	26.	8.	9.	4.	204	6.51
WSW	0.	1.	3.	19.	12.	24.	38.	37.	41.	19.	6.	12.	230	7.29
W	1.	0.	9.	22.	19.	32.	34.	44.	30.	30.	3.	25.	271	7.53
WNW	0.	0.	8.	17.	19.	10.	22.	13.	20.	9.	4.	4.	125	6.55
NW	0.	2.	4.	13.	10.	9.	9.	4.	2.	9.	9.	2.	63	5.87
NNW	0.	1.	1.	8.	9.	7.	9.	3.	0.	1.	0.	0.	31	5.04
N	0.	0.	8.	20.	10.	12.	6.	4.	2.	3.	0.	0.	65	4.88
VARIABLE													0	0.00
CALC													1	0.20
TOTAL	1.	7.	68	221.	257.	310.	352	329	294.	198.	72.	120	2170	6.80

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11			>11
NNE	0.00	0.00	0.74	2.12	2.07	2.67	3.13	2.95	1.75	1.11	0.32	0.05	16.91	6.29
NE	0.00	0.00	0.09	0.09	0.18	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.60	4.46
ENE	0.00	0.00	0.14	0.46	0.23	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.92	3.88
E	0.00	0.00	0.18	0.23	0.18	0.37	0.46	0.00	0.00	0.00	0.00	0.00	1.43	5.06
ESE	0.00	0.00	0.05	0.14	0.65	0.65	0.41	0.37	0.05	0.00	0.05	0.14	2.49	6.17
SE	0.00	0.00	0.05	0.28	0.83	1.29	1.11	0.92	0.60	0.69	0.23	0.46	6.45	7.23
SSE	0.00	0.00	0.32	0.69	0.83	1.24	1.01	0.88	0.92	0.74	0.69	1.47	8.80	7.85
S	0.00	0.05	0.37	0.65	1.20	0.97	1.29	1.11	0.74	0.65	0.37	0.83	8.20	7.13
SSW	0.00	0.05	0.18	0.51	0.97	1.20	1.43	1.52	1.15	0.65	0.51	0.41	8.57	7.17
SW	0.00	0.05	0.37	0.65	1.24	1.43	2.12	1.57	1.20	0.37	0.23	0.18	9.40	6.51
WSW	0.00	0.05	0.23	0.69	0.55	1.11	1.75	2.63	1.89	0.88	0.28	0.55	10.60	7.29
W	0.05	0.00	0.41	1.01	0.88	1.47	1.57	2.12	2.30	1.38	0.14	1.15	12.49	7.53
WNW	0.00	0.00	0.23	0.78	0.88	0.46	1.01	0.60	0.92	0.41	0.28	0.18	5.76	6.55
NW	0.00	0.09	0.28	0.60	0.46	0.23	0.41	0.18	0.09	0.23	0.23	0.09	2.90	5.87
NNW	0.00	0.05	0.05	0.37	0.23	0.32	0.23	0.14	0.00	0.05	0.00	0.00	1.43	5.04
N	0.00	0.00	0.37	0.92	0.46	0.55	0.28	0.18	0.09	0.14	0.00	0.00	3.00	4.88
VARIABLE													0.00	0.00
CALC													0.05	0.20
TOTAL	0.05	0.32	4.06	10.18	11.84	14.29	16.22	15.16	11.71	7.28	3.32	5.53	100.00	6.80

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2184

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2170

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS BAA (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	1	0	2	1	1	5	10.00
SSE	0	0	0	0	1	0	0	1	3	2	1	3	11	9.76
S	0	0	0	0	4	6	6	7	4	6	3	5	41	8.08
SSW	0	0	0	1	7	19	17	12	12	9	2	0	75	6.87
SW	0	0	0	7	18	24	24	17	9	1	0	0	96	6.07
WSW	0	0	0	7	14	25	46	29	7	2	0	0	130	6.39
W	0	0	0	1	6	32	67	57	43	19	3	2	250	7.14
WNW	0	0	0	1	5	8	25	33	21	17	10	14	134	8.24
NW	0	0	0	0	0	0	0	1	0	1	0	1	3	9.50
NNW	0	0	0	0	1	0	0	0	0	0	0	0	1	5.00
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	0	0	17	56	134	185	158	95	55	20	26	746	7.16

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.09	0.03	0.05	0.23	10.00
SSE	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.14	0.09	0.05	0.14	0.50	9.76
S	0.00	0.00	0.00	0.00	0.18	0.27	0.27	0.32	0.18	0.27	0.14	0.23	1.86	8.08
SSW	0.00	0.00	0.00	0.05	0.32	0.86	0.77	0.54	0.54	0.23	0.09	0.00	3.40	6.87
SW	0.00	0.00	0.00	0.32	0.82	1.09	1.09	0.77	0.23	0.05	0.00	0.00	4.35	6.07
WSW	0.00	0.00	0.00	0.32	0.63	1.13	2.09	1.32	0.32	0.09	0.00	0.00	5.90	6.39
W	0.00	0.00	0.00	0.05	0.27	2.36	3.04	2.59	1.95	0.86	0.14	0.09	11.34	7.14
WNW	0.00	0.00	0.00	0.05	0.23	0.36	1.13	1.50	0.95	0.77	0.45	0.63	6.08	8.24
NW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.05	0.14	9.50
NNW	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	5.00
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.00	0.77	2.54	6.08	8.39	7.17	4.31	2.49	0.91	1.18	33.83	7.16

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2200

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1993
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS 488 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	0	0	0	0	0	1	0	0	0	0	.1	7.90
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	1	1	0	0	4	4	12.93
SSW	0	0	0	0	1	1	0	2	1	1	0	0	2	7.93
SW	0	0	1	0	1	0	0	0	0	0	0	0	4	7.10
WSW	0	0	1	1	3	0	0	0	0	0	0	0	2	3.70
W	0	0	0	2	1	0	0	0	0	0	0	0	3	4.00
WNW	0	0	0	1	0	1	1	0	0	0	0	0	3	4.10
NW	0	0	0	0	1	0	1	0	0	0	0	2	5	7.94
NNW	0	0	0	0	0	0	0	0	0	0	0	1	4	7.68
N	0	0	0	0	1	0	0	0	0	0	0	0	0	0.00
VARIABLE	0	0	0	0	1	0	0	0	0	0	0	0	1	4.60
CALM													0	0.00
TOTAL	0	0	2	4	8	2	2	5	2	1	0	7	33	7.05

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05	7.90
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.18	0.18	12.93
SSW	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.09	0.05	0.05	0.00	0.00	0.09	7.93
SW	0.00	0.00	0.05	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	7.10
WSW	0.00	0.00	0.05	0.05	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.70
W	0.00	0.00	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	4.00
WNW	0.00	0.00	0.00	0.05	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.09	0.23	4.10
NW	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.05	0.00	0.00	0.00	0.05	0.19	7.94
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VARIABLE	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	4.60
CALM													0.00	0.00
TOTAL	0.00	0.00	0.09	0.18	0.36	0.09	0.09	0.23	0.09	0.05	0.00	0.32	1.50	7.05

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS 0C0 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	0	1	0	0	0	0	0	0	0	1	4 10
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
SE	0	0	0	0	0	0	0	0	0	1	0	1	2	10 75
SSE	0	0	0	0	1	1	2	1	1	0	0	3	9	9 13
S	0	0	0	0	2	1	2	0	1	0	0	2	8	8 45
SSW	0	0	0	2	3	1	3	0	1	1	0	0	13	5 64
SW	0	0	1	4	0	0	1	0	0	1	1	0	8	5 50
WSW	0	0	0	3	3	0	0	0	0	0	0	0	6	3 87
W	0	0	1	1	1	0	0	0	0	0	0	0	3	3 53
WNW	0	0	0	2	0	0	3	0	1	0	0	0	3	6 06
NW	0	0	0	0	0	0	1	0	2	0	1	1	5	9 06
NNW	0	0	0	0	1	0	0	0	0	0	0	0	1	4 90
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
VARIABLE													0	0 00
CALM													0	0 00
TOTAL	0	0	2	12	14	3	14	1	6	3	2	7	64	6 64

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	4 10
NE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ENE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
E	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ESE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
SE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 00	0 05	0 09	10 75
SSE	0 00	0 00	0 00	0 00	0 05	0 05	0 09	0 05	0 05	0 00	0 00	0 14	0 41	9 13
S	0 00	0 00	0 00	0 00	0 09	0 05	0 09	0 00	0 05	0 00	0 00	0 09	0 36	8 45
SSW	0 00	0 00	0 00	0 09	0 23	0 05	0 14	0 00	0 05	0 05	0 00	0 00	0 39	5 64
SW	0 00	0 00	0 05	0 18	0 00	0 00	0 05	0 00	0 00	0 05	0 05	0 00	0 36	5 50
WSW	0 00	0 00	0 00	0 14	0 14	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 27	3 87
W	0 00	0 00	0 05	0 05	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 14	3 53
WNW	0 00	0 00	0 00	0 09	0 00	0 00	0 23	0 00	0 05	0 00	0 00	0 00	0 36	6 06
NW	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 00	0 09	0 00	0 05	0 05	0 23	9 06
NNW	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	4 90
N	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
VARIABLE													0 00	0 00
CALM													0 00	0 00
TOTAL	0 00	0 00	0 09	0 34	0 63	0 14	0 63	0 05	0 27	0 14	0 09	0 32	2 90	6 64

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS 808 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11			>11
NNE	0.	1.	5	5	7	18	10	2	3	1	0	0	52	5.39
NE	0	0	1	5	8	9	0	0	0	0	0	0	23	4.55
ENE	0	0	1	0	3	2	0	0	0	0	0	0	6	4.55
E	0	0	0	3	5	5	2	3	0	0	0	0	18	5.39
ESE	0	0	1	3	1	8	2	0	0	1	0	0	16	5.48
SE	0	0	1	2	14	12	11	11	9	4	4	4	72	6.99
SSE	0	0	3	18	24	23	17	15	10	6	6	15	138	6.86
S	0	0	7	17	11	10	3	5	3	1	3	6	64	6.20
SSW	0	0	8	12	10	4	0	1	0	1	0	3	39	4.80
SW	0	0	8	7	7	1	0	0	0	0	0	0	23	3.52
WSW	0	0	5	12	4	0	0	0	0	0	0	0	21	3.42
W	0	1	8	7	5	3	1	0	0	0	0	0	25	3.68
WNW	0	0	5	9	7	8	3	1	2	3	1	0	39	5.27
NW	0	2	6	10	11	12	8	5	3	1	2	4	64	5.78
NNW	0	1	2	6	3	3	3	1	0	0	0	0	19	4.47
N	0	0	6	8	9	2	1	0	0	0	0	0	26	3.95
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	5	67	124	129	120	61	45	30	18	20	32	647	5.65

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11			>11
NNE	0.00	0.05	0.23	0.23	0.32	0.82	0.45	0.09	0.14	0.05	0.00	0.00	2.34	5.39
NE	0.00	0.00	0.05	0.23	0.34	0.41	0.00	0.00	0.00	0.00	0.00	0.00	1.04	4.55
ENE	0.00	0.00	0.05	0.00	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.27	4.55
E	0.00	0.00	0.00	0.14	0.23	0.23	0.09	0.14	0.00	0.00	0.00	0.00	0.82	5.39
ESE	0.00	0.00	0.05	0.14	0.05	0.36	0.09	0.00	0.00	0.05	0.00	0.00	0.73	5.48
SE	0.00	0.00	0.05	0.09	0.63	0.34	0.30	0.30	0.41	0.18	0.18	0.18	3.27	6.99
SSE	0.00	0.00	0.14	0.82	1.09	1.04	0.77	0.73	0.45	0.27	0.27	0.68	6.86	6.86
S	0.00	0.00	0.32	0.77	0.50	0.45	0.14	0.23	0.14	0.05	0.14	0.27	2.99	6.20
SSW	0.00	0.00	0.36	0.54	0.45	0.18	0.00	0.05	0.00	0.05	0.00	0.14	1.77	4.80
SW	0.00	0.00	0.36	0.32	0.32	0.05	0.00	0.00	0.00	0.00	0.00	0.00	1.04	3.52
WSW	0.00	0.00	0.23	0.54	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	3.42
W	0.00	0.05	0.36	0.32	0.23	0.14	0.05	0.00	0.00	0.00	0.00	0.00	1.13	3.68
WNW	0.00	0.00	0.23	0.41	0.32	0.36	0.14	0.05	0.09	0.14	0.05	0.00	1.77	5.27
NW	0.00	0.09	0.27	0.45	0.50	0.54	0.36	0.23	0.14	0.05	0.09	0.18	2.90	5.78
NNW	0.00	0.05	0.09	0.27	0.14	0.14	0.14	0.05	0.00	0.00	0.00	0.00	0.86	4.47
N	0.00	0.00	0.27	0.36	0.41	0.09	0.05	0.00	0.00	0.00	0.00	0.00	1.18	3.95
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.23	3.04	5.62	5.85	5.44	2.77	2.04	1.36	0.82	0.73	1.45	29.34	5.65

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS 080 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	1	20	25	25	12	16	1	2	0	0	0	102	4.45
NE	0	1	3	9	2	0	0	0	0	0	0	0	11	3.15
ENE	0	2	5	8	3	2	0	0	0	0	0	0	20	3.47
E	0	2	4	7	1	3	2	1	0	0	0	0	20	4.07
ESE	0	0	4	3	2	0	0	1	1	0	0	1	14	4.67
SE	0	1	10	17	8	9	10	6	5	4	1	4	79	5.83
SSE	0	1	7	13	10	4	7	7	2	3	0	1	55	5.27
S	0	1	7	9	9	1	1	0	0	1	0	1	22	4.50
SSW	0	2	1	1	0	0	0	0	0	0	0	0	4	2.33
SW	0	1	3	2	1	0	1	0	0	0	0	0	8	3.36
WSW	0	0	4	1	1	0	0	0	0	0	0	0	6	3.00
W	0	0	4	1	2	1	0	0	0	0	0	0	10	3.30
WNW	0	0	1	2	4	3	3	2	0	1	0	0	16	5.57
NW	0	0	2	3	1	2	1	2	0	2	2	0	19	6.26
NNW	0	0	2	3	0	1	1	0	0	0	0	0	7	4.03
N	0	1	4	9	5	3	3	0	1	0	1	0	27	4.51
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	13	85	103	70	41	45	20	11	11	4	7	412	4.74

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.03	0.91	1.13	1.13	0.34	0.73	0.05	0.09	0.00	0.00	0.00	4.63	4.45
NE	0.00	0.03	0.14	0.23	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	3.15
ENE	0.00	0.09	0.23	0.34	0.14	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.91	3.47
E	0.00	0.09	0.18	0.32	0.05	0.14	0.09	0.05	0.00	0.00	0.00	0.00	0.91	4.07
ESE	0.00	0.00	0.27	0.14	0.09	0.00	0.00	0.05	0.05	0.00	0.00	0.05	0.63	4.67
SE	0.00	0.03	0.45	0.77	0.36	0.41	0.45	0.27	0.23	0.18	0.05	0.18	3.40	5.83
SSE	0.00	0.03	0.32	0.39	0.43	0.18	0.32	0.32	0.09	0.14	0.00	0.05	2.49	5.27
S	0.00	0.03	0.32	0.23	0.23	0.05	0.05	0.00	0.00	0.05	0.00	0.05	1.00	4.50
SSW	0.00	0.09	0.03	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	2.33
SW	0.00	0.03	0.14	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.36	3.36
WSW	0.00	0.00	0.18	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	3.00
W	0.00	0.00	0.27	0.05	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.45	3.30
WNW	0.00	0.00	0.05	0.09	0.18	0.14	0.14	0.09	0.00	0.05	0.00	0.00	0.73	5.57
NW	0.00	0.00	0.09	0.14	0.05	0.09	0.05	0.09	0.00	0.09	0.09	0.00	0.68	6.26
NNW	0.00	0.00	0.09	0.14	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.32	4.03
N	0.00	0.03	0.18	0.41	0.23	0.14	0.14	0.00	0.05	0.00	0.05	0.00	1.22	4.51
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.39	3.85	4.76	3.17	1.86	2.04	0.91	0.50	0.50	0.18	0.32	18.68	4.74

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS 9F8 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	4	17	31	38	16	5	1	0	0	0	112	5.14
NE	0	0	6	8	0	2	0	0	0	0	0	0	16	3.58
ENE	0	0	3	2	1	0	0	0	0	0	0	0	6	3.10
E	0	0	3	0	0	0	0	0	0	0	0	0	3	2.90
ESE	0	1	0	0	1	0	0	0	0	0	0	0	2	3.40
SE	0	0	2	1	1	1	0	2	0	0	0	0	7	4.79
SSE	0	0	2	2	0	1	1	0	0	0	0	1	7	5.16
S	0	0	2	2	1	0	0	0	0	0	0	0	5	3.32
SSW	0	0	1	1	0	0	0	0	0	0	0	0	2	3.10
SW	0	0	0	1	0	0	0	0	0	0	0	0	1	3.80
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
W	0	0	0	0	2	1	0	0	0	0	0	0	3	4.90
WNW	0	0	0	0	1	2	0	0	1	1	0	0	5	6.84
NW	0	0	0	0	0	1	0	0	1	1	0	0	3	7.80
NNW	0	0	0	0	0	1	1	0	1	1	0	0	4	7.65
N	0	0	2	2	2	3	0	1	0	0	0	0	10	4.69
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	1	25	36	40	50	18	8	4	3	0	1	184	4.91

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.18	0.77	1.41	1.72	0.73	0.23	0.05	0.00	0.00	0.00	5.08	5.14
NE	0.00	0.00	0.27	0.36	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.58
ENE	0.00	0.00	0.14	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	3.10
E	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	2.90
ESE	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.40
SE	0.00	0.00	0.09	0.05	0.05	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.32	4.79
SSE	0.00	0.00	0.09	0.09	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.05	0.32	5.16
S	0.00	0.00	0.09	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	3.32
SSW	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.10
SW	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.80
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W	0.00	0.00	0.00	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	4.90
WNW	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.00	0.05	0.05	0.00	0.00	0.23	6.84
NW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.05	0.00	0.00	0.14	7.80
NNW	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.00	0.18	7.65
N	0.00	0.00	0.09	0.09	0.09	0.14	0.00	0.05	0.00	0.00	0.00	0.00	0.43	4.69
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.05	1.13	1.63	1.81	2.27	0.82	0.36	0.18	0.14	0.00	0.05	8.44	4.91

*TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS 000 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	2	6	9	22	25	20	9	3	2	98	7.47
NE	0	0	0	0	1	1	0	0	0	0	0	0	2	4.90
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
E	0	0	0	1	1	0	0	0	0	0	0	0	2	3.85
ESE	0	0	1	0	0	0	1	0	0	0	0	0	2	4.60
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SSE	0	0	0	1	0	0	0	0	0	0	0	0	1	3.70
S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
W	0	0	0	0	1	0	0	0	0	0	0	0	1	5.00
WNW	0	0	0	0	0	1	0	0	0	0	0	0	1	5.90
NW	0	0	0	0	0	0	0	1	0	1	0	0	2	8.50
NNW	0	0	0	0	1	0	1	0	0	0	0	0	2	5.75
N	0	0	0	0	0	2	1	2	1	0	0	0	6	7.18
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	0	1	4	10	13	25	28	21	10	3	2	117	7.22

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.00	0.09	0.27	0.41	1.00	1.13	0.91	0.41	0.14	0.09	4.44	7.47
NE	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.09	4.90
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.85
ESE	0.00	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.09	4.60
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSE	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.70
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	5.00
WNW	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	5.90
NW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.09	8.50
NNW	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.09	5.75
N	0.00	0.00	0.00	0.00	0.00	0.09	0.05	0.09	0.05	0.00	0.00	0.00	0.27	7.18
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.05	0.18	0.45	0.59	1.13	1.27	0.95	0.45	0.14	0.09	5.31	7.22

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 3TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 07/01/83 TO 09/30/83
 STABILITY CLASS ALL (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	2	29	49	70	77	64	34	26	10	3	2	366	5.61
NE	0	1	10	18	11	12	0	0	0	0	0	0	52	3.97
ENE	0	2	9	10	7	4	0	0	0	0	0	0	32	3.61
E	0	2	7	11	7	9	4	4	0	0	0	0	43	4.53
ESE	0	1	8	6	4	8	3	1	1	1	0	1	34	4.97
SE	0	1	13	20	23	22	21	20	14	11	6	10	161	6.49
SSE	0	1	12	34	36	29	27	23	16	11	0	27	225	6.75
S	0	1	16	24	23	18	12	13	9	8	6	14	144	6.53
SSW	0	2	10	17	23	25	20	15	14	8	2	3	139	6.00
SW	0	1	13	21	27	25	26	17	9	2	1	0	138	5.40
WSW	0	0	10	24	25	25	44	29	7	2	0	0	168	5.73
W	0	1	15	12	18	57	68	57	43	19	3	2	295	6.62
WNW	0	0	6	15	17	23	37	36	25	22	11	16	208	7.34
NW	0	2	8	13	13	15	11	10	6	6	5	7	96	6.34
NNW	0	1	4	9	6	5	6	1	1	1	0	0	34	4.85
N	0	1	12	19	17	10	5	3	2	0	1	0	70	4.36
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	19	182	302	327	363	350	265	169	101	45	82	2205	6.06

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.09	1.32	2.22	3.17	3.49	2.90	1.34	1.18	0.45	0.14	0.09	16.60	5.61
NE	0.00	0.05	0.45	0.82	0.30	0.34	0.00	0.00	0.00	0.00	0.00	0.00	2.36	3.97
ENE	0.00	0.09	0.41	0.45	0.32	0.18	0.00	0.00	0.00	0.00	0.00	0.00	1.45	3.61
E	0.00	0.09	0.32	0.30	0.32	0.36	0.18	0.18	0.00	0.00	0.00	0.00	1.95	4.53
ESE	0.00	0.05	0.36	0.27	0.18	0.36	0.14	0.05	0.05	0.05	0.00	0.05	1.54	4.97
SE	0.00	0.05	0.59	0.91	1.04	1.00	0.95	0.91	0.63	0.30	0.27	0.45	7.30	6.49
SSE	0.00	0.05	0.54	1.54	1.63	1.32	1.22	1.13	0.73	0.30	0.32	1.22	10.20	6.75
S	0.00	0.05	0.73	1.09	1.04	0.82	0.54	0.59	0.41	0.36	0.27	0.63	6.53	6.53
SSW	0.00	0.09	0.45	0.77	1.04	1.13	0.91	0.68	0.63	0.36	0.09	0.14	6.30	6.00
SW	0.00	0.05	0.59	0.95	1.22	1.13	1.18	0.77	0.23	0.09	0.05	0.00	6.26	5.40
WSW	0.00	0.00	0.45	1.09	1.13	1.13	2.09	1.32	0.32	0.09	0.00	0.00	7.62	5.73
W	0.00	0.05	0.68	0.54	0.82	2.59	3.08	2.59	1.95	0.86	0.14	0.09	13.38	6.62
WNW	0.00	0.00	0.27	0.68	0.77	1.04	1.68	1.63	1.13	1.00	0.30	0.73	9.43	7.34
NW	0.00	0.09	0.36	0.59	0.59	0.68	0.50	0.45	0.27	0.27	0.23	0.32	4.35	6.34
NNW	0.00	0.05	0.18	0.41	0.27	0.23	0.27	0.05	0.05	0.05	0.00	0.00	1.54	4.85
N	0.00	0.05	0.34	0.86	0.77	0.45	0.23	0.14	0.09	0.00	0.05	0.00	3.17	4.36
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.86	8.25	13.70	14.83	16.46	15.87	12.02	7.66	4.38	2.04	3.72	100.00	6.06

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2205

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS BAA (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
NE	0	0	0	0	0	0	0	0	0	0	0	1	1	11 40
ENE	0	0	0	0	0	0	0	0	0	0	0	1	1	13 10
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00
SE	0	0	0	0	0	1	0	3	1	2	0	2	9	8 67
SSE	0	0	0	0	2	3	3	4	2	4	4	3	23	8 38
S	0	0	3	3	6	8	16	7	3	2	2	1	51	8 45
SSW	0	0	6	13	8	4	7	2	1	0	0	1	42	4 77
SW	0	1	5	9	17	12	3	4	1	1	0	0	53	4 95
WSW	0	0	3	13	19	21	19	10	1	2	0	0	88	5 53
W	0	0	2	7	18	34	31	20	9	11	3	0	135	6 42
WNW	0	0	1	2	3	6	7	8	2	4	2	12	47	8 39
NW	0	0	0	0	1	0	0	1	0	0	0	0	2	6 00
NNW	0	0	0	0	1	0	0	0	0	0	0	0	1	4 10
N	0	0	0	0	0	0	1	0	0	0	0	0	1	6 40
VARIABLE													0	0 00
CALM													0	0 00
TOTAL	0	1	20	47	75	89	87	89	20	26	11	21	456	6 30

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
NE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 05	11 40
ENE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 05	13 10
E	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
ESE	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
SE	0 00	0 00	0 00	0 00	0 00	0 03	0 00	0 14	0 05	0 09	0 00	0 09	0 41	8 67
SSE	0 00	0 00	0 00	0 00	0 09	0 14	0 14	0 18	0 09	0 18	0 18	0 14	1 15	8 38
S	0 00	0 00	0 14	0 14	0 28	0 37	0 73	0 52	0 14	0 09	0 09	0 05	2 34	8 45
SSW	0 00	0 00	0 28	0 60	0 37	0 18	0 32	0 09	0 05	0 00	0 00	0 05	1 93	4 77
SW	0 00	0 05	0 23	0 41	0 78	0 55	0 14	0 18	0 05	0 05	0 00	0 00	2 43	4 95
WSW	0 00	0 00	0 14	0 60	0 87	0 96	0 87	0 46	0 05	0 09	0 00	0 00	4 04	5 53
W	0 00	0 00	0 09	0 32	0 83	1 56	1 42	0 92	0 41	0 51	0 14	0 00	6 20	6 42
WNW	0 00	0 00	0 05	0 09	0 14	0 28	0 32	0 37	0 09	0 18	0 09	0 55	2 16	8 39
NW	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 09	6 00
NNW	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 05	4 10
N	0 00	0 00	0 00	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 05	6 40
VARIABLE													0 00	0 00
CALM													0 00	0 00
TOTAL	0 00	0 05	0 92	2 16	3 45	4 09	4 00	2 71	0 92	1 19	0 51	0 96	20 95	6 30

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMEE AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS 888 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0	0	1	0	0	1	9.10
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	1	3	2	1	0	1	8	8.32
SSE	0	0	0	0	1	0	2	1	1	0	0	3	8	9.32
S	0	0	0	3	1	0	1	0	0	0	0	0	5	4.18
SSW	0	0	0	0	0	0	1	0	0	0	0	0	1	4.20
SW	0	0	2	0	0	0	0	0	0	0	0	0	2	2.90
WSW	0	0	0	0	0	0	0	0	1	0	0	0	1	8.30
W	0	0	1	1	5	0	0	0	0	0	0	0	7	4.07
WNW	0	0	0	0	0	1	3	0	0	0	0	1	5	8.96
NW	0	0	0	0	0	0	0	0	0	0	1	0	1	10.30
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
N	0	0	0	0	0	0	0	0	1	0	0	0	1	8.40
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	0	3	4	7	1	8	4	5	2	1	5	40	7.06

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	9.10
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.14	0.09	0.03	0.00	0.03	0.37	8.32
SSE	0.00	0.00	0.00	0.00	0.03	0.00	0.09	0.03	0.03	0.00	0.00	0.14	0.37	9.32
S	0.00	0.00	0.00	0.14	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.23	4.18
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.03	4.20
SW	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.90
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.03	8.30
W	0.00	0.00	0.03	0.03	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	4.07
WNW	0.00	0.00	0.00	0.00	0.00	0.03	0.14	0.00	0.00	0.00	0.00	0.03	0.23	8.96
NW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	10.30
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.03	8.40
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.14	0.18	0.32	0.03	0.37	0.18	0.23	0.09	0.03	0.23	1.84	7.06

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS 0C0 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	0	0	0	1	0	1	0	0	0	0	0	2	5.90
NE	0	0	0	0	0	0	1	0	0	0	0	0	1	7.00
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0	0	0	0	1	1	17.80
SE	0	0	0	0	0	1	1	1	3	0	1	2	9	9.21
SSE	0	0	1	1	0	4	2	1	4	3	0	5	21	8.21
S	0	0	1	2	2	1	1	1	0	1	0	1	10	6.33
SSW	0	0	2	1	0	0	0	0	0	0	0	1	4	9.48
SW	0	0	1	1	0	0	0	2	0	0	0	0	4	5.08
WSW	0	0	0	1	0	3	0	0	3	0	0	1	8	7.28
W	0	0	0	1	1	1	0	0	0	0	0	0	3	4.63
WNW	0	0	1	2	4	1	2	1	0	0	0	2	13	6.68
NW	0	0	0	1	0	0	0	0	1	0	0	0	2	5.75
NNW	0	0	0	0	0	0	0	0	0	1	0	0	1	9.10
N	0	0	1	0	0	1	0	0	0	0	0	0	2	4.10
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	0	7	10	8	12	8	6	11	9	1	13	81	7.22

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)													MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	
NNE	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.09	5.90
NE	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.05	7.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	17.20
SE	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.14	0.00	0.03	0.09	0.41	9.21
SSE	0.00	0.00	0.03	0.03	0.00	0.18	0.09	0.03	0.18	0.14	0.00	0.23	0.96	8.21
S	0.00	0.00	0.03	0.09	0.09	0.03	0.03	0.03	0.00	0.03	0.00	0.03	0.46	6.33
SSW	0.00	0.00	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.18	9.48
SW	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.18	5.08
WSW	0.00	0.00	0.00	0.03	0.00	0.14	0.00	0.00	0.14	0.00	0.00	0.03	0.37	7.28
W	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.14	4.63
WNW	0.00	0.00	0.03	0.09	0.18	0.03	0.09	0.03	0.00	0.00	0.00	0.09	0.60	6.68
NW	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.06	0.00	0.00	0.09	5.75
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	9.10
N	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.09	4.10
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.00	0.32	0.46	0.37	0.55	0.37	0.28	0.51	0.23	0.05	0.60	3.72	7.22

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS 8D8 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)											TOTAL	MEAN SPEED	
	1	2	3	4	5	6	7	8	9	10	11			>11
NNE	0	1	2	4	1	2	1	0	1	0	0	0	12	4.30
NE	0	0	0	0	2	1	0	0	0	0	0	0	3	5.10
ENE	0	0	2	1	1	0	0	0	0	0	2	0	6	5.72
E	0	0	1	2	3	1	2	2	0	0	0	9	20	8.66
ESE	0	0	0	2	3	3	10	6	6	3	0	7	40	8.03
SE	0	1	4	6	9	13	18	18	15	11	8	14	117	7.74
SSE	0	0	3	4	5	4	8	4	2	3	2	13	48	9.03
S	0	1	4	0	1	2	1	1	0	4	4	9	27	10.36
SSW	0	1	5	1	2	2	3	0	1	1	2	9	27	8.38
SW	0	1	4	2	6	0	0	1	0	2	0	1	17	4.91
WSW	0	2	3	4	1	1	5	1	3	2	1	1	24	6.23
W	0	0	0	2	3	4	3	3	4	1	1	2	23	8.01
WNW	0	1	1	7	1	8	3	2	1	0	1	6	31	6.54
NW	0	1	3	8	7	6	7	4	3	3	0	2	44	5.88
NNW	0	1	1	7	7	1	1	4	0	0	0	0	22	4.63
N	2	2	3	10	5	5	1	2	0	0	0	0	30	4.04
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	1	12	36	60	57	53	63	48	36	30	21	73	491	7.21

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.05	0.09	0.18	0.05	0.09	0.15	0.00	0.05	0.00	0.00	0.00	0.55	4.30
NE	0.00	0.00	0.00	0.00	0.09	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.14	5.10
ENE	0.00	0.00	0.09	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.28	5.72
E	0.00	0.00	0.05	0.09	0.14	0.05	0.09	0.09	0.00	0.00	0.00	0.41	0.92	8.66
ESE	0.00	0.00	0.00	0.09	0.14	0.14	0.46	0.28	0.28	0.11	0.00	0.72	1.14	8.03
SE	0.00	0.05	0.18	0.28	0.41	0.60	0.83	0.83	0.69	0.51	0.37	0.14	5.37	7.74
SSE	0.00	0.00	0.14	0.18	0.23	0.18	0.37	0.18	0.09	0.14	0.09	0.60	2.20	9.03
S	0.00	0.05	0.18	0.00	0.05	0.09	0.05	0.05	0.00	0.18	0.18	0.41	1.24	10.36
SSW	0.00	0.05	0.23	0.05	0.09	0.09	0.14	0.00	0.05	0.05	0.09	0.41	1.24	8.38
SW	0.00	0.05	0.18	0.09	0.28	0.00	0.00	0.05	0.00	0.09	0.00	0.05	0.78	4.91
WSW	0.00	0.09	0.14	0.18	0.05	0.05	0.23	0.05	0.14	0.09	0.05	0.05	1.10	6.23
W	0.00	0.00	0.00	0.09	0.14	0.18	0.14	0.14	0.18	0.05	0.05	0.09	1.06	8.01
WNW	0.00	0.05	0.05	0.32	0.05	0.37	0.14	0.09	0.05	0.00	0.05	0.28	1.42	6.54
NW	0.00	0.05	0.14	0.37	0.32	0.28	0.32	0.18	0.14	0.14	0.00	0.09	2.02	5.88
NNW	0.00	0.05	0.05	0.32	0.32	0.05	0.05	0.18	0.00	0.00	0.00	0.00	1.01	4.63
N	0.09	0.09	0.14	0.46	0.23	0.23	0.05	0.09	0.00	0.00	0.00	0.00	1.38	4.04
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.09	0.55	1.65	2.76	2.62	2.43	2.89	2.20	1.65	1.38	0.96	3.35	22.55	7.21

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2218

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS 988 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0	2	16	33	18	6	7	2	0	0	0	2	86	4.33
NE	0	4	5	3	3	1	0	0	0	0	0	0	16	3.04
ENE	0	0	1	2	0	2	0	2	0	1	0	0	8	3.69
E	0	1	4	4	5	1	0	0	1	0	1	1	18	4.39
ESE	0	0	4	10	8	5	0	0	0	0	0	0	27	4.10
SE	0	1	0	3	5	4	0	0	0	1	1	3	18	4.52
SSE	0	0	2	2	2	1	1	0	0	1	1	3	10	4.49
S	0	1	0	2	1	0	1	0	0	0	0	2	7	3.11
SSW	0	0	0	1	0	0	0	0	1	0	0	0	2	3.65
SW	0	0	1	0	1	0	0	0	0	0	0	0	2	3.50
WSW	0	0	0	1	1	0	0	0	0	0	0	1	3	4.83
W	0	0	1	1	0	1	0	0	0	0	0	8	11	12.49
WNW	0	0	1	1	1	1	3	1	1	1	1	5	16	8.86
W	0	2	2	2	3	2	2	0	0	1	0	0	14	4.60
NNW	0	0	0	0	5	5	4	0	1	0	2	2	19	6.93
N	0	1	6	7	5	13	4	4	0	0	0	0	40	4.76
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	12	43	72	58	42	22	9	4	4	6	25	297	5.40

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	UPPER CLASS INTERVALS OF WIND SPEED (MPH)												TOTAL	MEAN SPEED
	1	2	3	4	5	6	7	8	9	10	11	>11		
NNE	0.00	0.09	0.73	1.52	0.83	0.28	0.32	0.09	0.00	0.00	0.00	0.09	3.95	4.33
NE	0.00	0.18	0.23	0.14	0.14	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.04
ENE	0.00	0.00	0.05	0.09	0.00	0.09	0.00	0.09	0.00	0.05	0.00	0.00	0.37	3.69
E	0.00	0.05	0.18	0.18	0.23	0.05	0.00	0.00	0.05	0.00	0.05	0.05	0.83	4.39
ESE	0.00	0.00	0.18	0.46	0.37	0.23	0.00	0.00	0.00	0.00	0.00	0.00	1.24	4.10
SE	0.00	0.05	0.00	0.14	0.23	0.18	0.00	0.00	0.00	0.05	0.05	0.14	0.83	4.52
SSE	0.00	0.00	0.09	0.09	0.09	0.05	0.05	0.00	0.00	0.00	0.00	0.09	0.46	4.49
S	0.00	0.05	0.00	0.05	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.32	3.11
SSW	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.09	3.65
SW	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.50
WSW	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.14	4.83
W	0.00	0.00	0.05	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.37	0.51	12.49
WNW	0.00	0.00	0.05	0.05	0.05	0.05	0.14	0.05	0.05	0.05	0.05	0.23	0.73	8.86
W	0.00	0.09	0.09	0.09	0.14	0.09	0.09	0.00	0.00	0.05	0.00	0.00	0.64	4.60
NNW	0.00	0.00	0.00	0.00	0.23	0.23	0.18	0.00	0.05	0.00	0.09	0.09	0.87	6.93
N	0.00	0.05	0.28	0.32	0.23	0.60	0.18	0.18	0.00	0.00	0.00	0.00	1.84	4.76
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.55	1.98	3.31	2.66	1.93	1.01	0.41	0.18	0.18	0.28	1.15	13.64	5.40

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1963
 DAMES AND MOORE JOB NO - 00377-062-09
 DATA PERIOD- 10/01/63 TO 12/31/63
 STABILITY CLASS B/F (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-64

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	8	38	49	51	37	11	5	7	1	3	210	5.47
NE	0	0	7	5	8	2	2	0	1	0	0	0	30	3.86
ENE	0	0	2	2	1	0	0	0	0	0	0	1	6	4.72
E	0	1	3	2	1	1	0	0	0	0	0	0	8	3.14
ESE	0	0	1	1	0	0	0	0	0	0	0	0	2	3.10
SE	0	0	1	1	2	0	0	0	0	0	0	0	4	3.70
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
WSW	0	0	1	0	0	0	0	0	0	0	0	0	1	2.90
W	0	0	1	1	1	1	0	0	0	0	0	0	4	4.13
WNW	0	1	1	0	0	0	0	1	0	0	0	0	3	3.83
NW	0	0	1	0	1	0	0	0	0	0	0	0	2	3.70
NNW	0	1	0	0	1	1	0	1	0	0	0	0	4	4.85
N	0	0	5	6	3	1	5	6	6	0	2	1	33	6.20
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	0	8	31	56	67	57	44	19	12	7	3	5	309	5.82

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.37	1.75	2.25	2.34	1.70	0.91	0.23	0.32	0.09	0.14	9.63	5.47
NE	0.00	0.23	0.32	0.23	0.37	0.09	0.09	0.00	0.05	0.00	0.00	0.00	1.38	3.86
ENE	0.00	0.00	0.09	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.28	4.72
E	0.00	0.05	0.14	0.09	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.37	3.14
ESE	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.10
SE	0.00	0.00	0.05	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.70
SSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	2.90
W	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.18	4.13
WNW	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.14	3.83
NW	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	3.70
NNW	0.00	0.05	0.00	0.00	0.05	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.18	4.85
N	0.00	0.00	0.23	0.28	0.14	0.05	0.23	0.28	0.28	0.00	0.09	0.05	1.61	6.20
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.00	0.37	1.42	2.57	3.08	2.62	2.02	0.87	0.55	0.32	0.14	0.23	14.19	5.82

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS 008 (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	0	3	4	9	29	65	78	86	98	57	33	432	8.42
NE	0	0	1	7	0	1	0	0	1	0	0	0	10	4.13
ENE	0	0	1	1	0	1	0	0	0	0	0	0	3	3.67
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
ESE	0	0	2	0	0	1	0	0	0	0	0	0	3	3.27
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
W	0	0	0	1	1	0	0	0	0	0	0	0	2	4.20
WNW	0	0	0	0	0	1	0	0	0	0	0	0	1	3.70
NW	0	0	0	0	1	1	0	0	0	0	0	0	2	5.35
NNW	0	0	0	0	0	1	1	1	0	0	0	0	3	6.53
N	0	0	0	0	1	1	3	5	4	6	1	6	27	8.93
VARIABLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
TOTAL	0	0	7	13	12	36	69	84	91	94	58	39	502	8.26

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.00	0.14	0.18	0.41	1.33	2.99	3.98	3.95	4.04	2.62	1.92	20.76	8.42
NE	0.00	0.00	0.05	0.32	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.46	4.13
ENE	0.00	0.00	0.05	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	3.67
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ESE	0.00	0.00	0.09	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.14	3.27
SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	4.20
W	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.70
WNW	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.09	5.35
NW	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.14	6.53
NNW	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.24	8.93
N	0.00	0.00	0.00	0.00	0.05	0.05	0.14	0.23	0.18	0.28	0.05	0.28	0.00	0.00
VARIABLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.32	0.60	0.55	1.65	3.17	3.86	4.18	4.32	2.66	1.79	23.11	8.26

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

TABLE 4A

SOUTHERN CALIFORNIA EDISON COMPANY
 SAN ONOFRE NUCLEAR GENERATING STATION
 4TH QUARTER, 1983
 DAMES AND MOORE JOB NO - 00377-082-09
 DATA PERIOD- 10/01/83 TO 12/31/83
 STABILITY CLASS ALL (10-40 METERS)
 WINDS AT 10 METER LEVEL

1-FEB-84

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN NUMBER OF OCCURRENCES)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0	3	29	79	78	88	113	94	92	97	98	38	769	7.08
NE	0	9	13	13	13	5	4	0	2	0	0	1	62	3.97
ENE	0	0	6	6	2	3	0	2	0	2	2	2	25	3.65
E	0	2	8	8	9	3	2	2	1	0	1	10	46	6.11
ESE	0	0	7	13	11	9	10	6	6	3	0	8	73	6.37
SE	0	2	8	10	16	19	20	25	21	15	10	22	165	7.66
SSE	0	0	6	7	10	12	14	10	9	10	6	26	112	8.52
S	0	2	8	10	12	11	20	9	3	7	7	12	101	7.47
SSW	0	1	13	16	10	6	11	2	3	1	2	11	76	6.13
SW	0	2	13	12	24	12	3	7	1	3	0	1	78	4.85
WSW	0	2	7	20	21	26	24	11	8	4	1	3	127	5.79
W	0	0	5	14	29	42	34	23	13	12	4	10	186	6.78
WNW	0	2	5	12	9	18	18	13	6	5	4	26	118	7.66
NW	0	3	6	11	13	9	9	5	5	4	1	2	68	5.64
NNW	0	2	1	7	14	9	6	6	1	1	2	2	51	5.72
N	2	3	15	23	14	21	16	17	11	6	6	7	141	5.94
VARIABLE													0	0.00
CALM													0	0.00
TOTAL	2	33	147	263	285	293	306	232	182	170	104	181	2198	6.74

WIND FREQUENCY DISTRIBUTION
 (FREQUENCY IN PERCENT OF TOTAL)

WIND DIRECTION	1	2	3	4	5	6	7	8	9	10	11	>11	TOTAL	MEAN SPEED
NNE	0.00	0.14	1.32	3.59	3.55	4.00	5.14	4.28	4.19	4.41	2.64	1.73	34.99	7.08
NE	0.00	0.41	0.59	0.68	0.59	0.23	0.18	0.00	0.09	0.00	0.00	0.05	2.82	3.97
ENE	0.00	0.00	0.27	0.27	0.09	0.14	0.00	0.09	0.00	0.09	0.09	0.09	1.14	3.65
E	0.00	0.09	0.36	0.36	0.41	0.14	0.09	0.09	0.05	0.00	0.05	0.45	2.09	6.11
ESE	0.00	0.00	0.32	0.59	0.50	0.41	0.45	0.27	0.27	0.14	0.00	0.36	3.32	6.37
SE	0.00	0.09	0.23	0.45	0.73	0.86	0.91	1.14	0.96	0.68	0.45	1.00	7.51	7.66
SSE	0.00	0.00	0.27	0.32	0.45	0.55	0.73	0.45	0.41	0.45	0.27	1.18	5.10	8.52
S	0.00	0.09	0.36	0.45	0.55	0.50	0.91	0.41	0.14	0.32	0.32	0.55	4.60	7.47
SSW	0.00	0.05	0.59	0.73	0.45	0.27	0.50	0.09	0.14	0.05	0.09	0.50	3.46	6.13
SW	0.00	0.09	0.59	0.55	1.09	0.55	0.14	0.32	0.05	0.14	0.00	0.05	3.55	4.85
WSW	0.00	0.09	0.32	0.91	0.96	1.18	1.09	0.50	0.36	0.18	0.05	0.14	5.78	5.79
W	0.00	0.00	0.23	0.64	1.32	1.91	1.55	1.05	0.59	0.55	0.18	0.45	8.46	6.78
WNW	0.00	0.09	0.23	0.55	0.41	0.82	0.82	0.59	0.27	0.23	0.18	1.18	5.37	7.66
NW	0.00	0.14	0.27	0.50	0.59	0.41	0.41	0.23	0.23	0.18	0.05	0.09	3.09	5.64
NNW	0.00	0.09	0.05	0.32	0.64	0.41	0.27	0.27	0.05	0.05	0.09	0.09	2.32	5.72
N	0.09	0.14	0.68	1.05	0.64	0.96	0.73	0.77	0.50	0.27	0.27	0.32	6.41	5.94
VARIABLE													0.00	0.00
CALM													0.00	0.00
TOTAL	0.09	1.50	6.69	11.97	12.97	13.33	13.92	10.56	8.28	7.73	4.73	8.23	100.00	6.74

TOTAL NUMBER OF POSSIBLE OBSERVATIONS - 2208

TOTAL NUMBER OF OBSERVATIONS WITH VALID SPEED, DIRECTION AND STABILITY - 2177

SECTION H. 10 CFR 50 APPENDIX I
AND 40 CFR 190 CONSIDERATIONS

The table in Section H presents the maximum dose to an individual for each of the four quarters and a yearly summary. Six different categories are presented: (1) Liquid Effluents - Whole Body, (2) Liquid Effluents - Organ, (3) Airborne Effluents - Iodines and Particulates, (4) Noble Gases - Gamma, (5) Noble Gases - Beta, and (6) Direct Radiation.

The doses for categories 1 and 2 were calculated using the methodology of the ODCM, this data is also presented in Table 2D for the third and fourth quarters. Categories 3, 4, and 5 were calculated utilizing RRRGS (Radioactive Release Report Generating System) software, Reg. Guide 1.109 methodology, and concurrent meteorology. Table 1E lists data similar to categories 3, 4, and 5 covering the third and fourth quarters using methods described in the ODCM and the historical meteorology (X/Q). Category 6 presents direct dose data measured by TLD dosimeters. Each portion of each category is footnoted to briefly describe each maximum individual dose presented.

10 CFR 50 APPENDIX I AND 40 CFR 190 CONSIDERATIONS

		Dose* (millirems)				
SOURCE		1st Q	2nd Q	3rd Q	4th Q	YEAR
Liquid Effluents	WHOLE BODY	1) 2.87E-2	2) 1.67E-2	3) 1.06E-2	4) 2.23E-2	5) 7.83E-2
	ORGAN	6) 6.73E-1	7) 2.74E-1	8) 2.17E-1	9) 3.02E-1	10) 1.46E+0
Airborne Effluents Iodines and Particulates		11) 4.34E-5	12) 1.60E-2	13) 9.22E-3	14) 2.20E-2	15) 4.63E-2
Noble Gases**	GAMMA	16) 5.49E-4	17) 1.67E-2	18) 9.43E-3	19) 1.40E-1	20) 1.56E-1
	BETA	21) 1.65E-3	22) 4.39E-2	23) 2.48E-2	24) 4.06E-1	25) 4.48E-1
Direct Radiation		26) 1.92E-1	27) 1.93E-1	28) 1.92E-1	29) 7.52E-2	30) 6.52E-1

* The numbered footnotes below briefly explain how each maximum dose was calculated, including the organ and the predominant pathway(s).

** Noble gas doses due to airborne effluents are in units of mrad reflecting the air dose.

1. This data was calculated using the methodology of the ODCM.
2. This data was calculated using the methodology of the ODCM.
3. This data was calculated using the methodology of the ODCM.
4. This data was calculated using the methodology of the ODCM.
5. This data was calculated using the methodology of the ODCM.
6. This data was calculated using the methodology of the ODCM; the GI-LLI received the maximum dose primarily by the saltwater fish pathway.
7. This data was calculated using the methodology of the ODCM; the GI-LLI received the maximum dose primarily by the saltwater fish pathway.
8. This data was calculated using the methodology of the ODCM; the GI-LLI received the maximum dose primarily by the saltwater fish pathway.
9. This data was calculated using the methodology of the ODCM; the GI-LLI received the maximum dose primarily by the saltwater fish pathway.

10. This data was calculated using the methodology of the ODCM; the GI-LLI received the maximum dose primarily by the saltwater fish pathway.
11. The maximum organ dose was to a child's thyroid and was located in the NNW sector. This was calculated using the activity reported in the January - June 1983 Semiannual Report with the assumptions of USNRC Regulatory Guide 1.109.
12. The maximum organ dose was to a child's thyroid and was located in the NNW sector. This was calculated using the activity reported in the January - June 1983 Semiannual Report with the assumptions of USNRC Regulatory Guide 1.109.
13. The maximum organ dose was to a child's thyroid and was located in the NNW sector. This was calculated using the reported activity with the assumptions of the USNRC Regulatory Guide 1.109.
14. The maximum organ dose was to a child's thyroid and was located in the NNW sector. This was calculated using the reported activity with the assumptions of the USNRC Regulatory Guide 1.109.
15. The maximum organ dose was to a child's thyroid and was located in the NNW sector. This was calculated using the reported activity and the activity reported in the January - June 1983 Semiannual Report with the assumptions of USNRC Regulatory Guide 1.109.
16. The maximum air dose for gamma radiation was located in the E sector at the exclusion area boundary and calculated with the assumptions of USNRC Regulatory Guide 1.109.
17. The maximum air dose for gamma radiation was located in the ENE sector at the exclusion area boundary and calculated with the assumptions of USNRC Regulatory Guide 1.109.
18. A maximum air dose of $9.91\text{E-}3$ mrad for gamma radiation was located in the SW sector, a seaward direction. The reported maximum air dose for gamma radiation was located in the NNW sector, a landward sector, at the exclusion area boundary and calculated with the assumptions of USNRC Regulatory Guide 1.109.
19. A maximum air dose of $5.49\text{E-}1$ mrad for gamma radiation was located in the SSW sector, a seaward direction. The reported maximum air dose for gamma radiation was located in the E sector, a landward sector, at the exclusion area boundary and calculated with the assumptions of USNRC Regulatory Guide 1.109.
20. The maximum air dose for gamma radiation was located in the E sector at the exclusion area boundary and calculated with the assumptions of the USNRC Regulatory Guide 1.109.
21. The maximum air dose for beta radiation was located in the E sector at the exclusion area boundary and calculated with the assumptions of the USNRC Regulatory Guide 1.109.

22. The maximum air dose for beta radiation was located in the ENE sector at the exclusion area boundary and calculated with the assumptions of the USNRC Regulatory Guide 1.109.
23. A maximum air dose of $2.60\text{E}-2$ mrad for beta radiation was located in the SW sector, a seaward direction. The reported maximum air dose for beta radiation was located in the NNW sector, a landward sector, at the exclusion area boundary and calculated with the assumptions of USNRC Regulatory Guide 1.109.
24. A maximum air dose of $1.60\text{E}+0$ mrad for beta radiation was located in the SW sector, a seaward direction. The reported maximum air dose for beta radiation was located in the E sector, a landward sector, at the exclusion area boundary and calculated with the assumptions of USNRC Regulatory Guide 1.109.
25. The maximum air dose for beta radiation was located in the E sector at the exclusion area boundary and was calculated with the assumptions of USNRC Regulatory Guide 1.109.
26. Measurements were made using TLD dosimeters; values were prorated to 300 hours per year; highest dose was measured at the San Onofre State Beach (Unit 1 North location).
27. Measurements were made using TLD dosimeters; values were prorated to 300 hours per year; highest dose was measured at the San Onofre State Beach (Unit 1 North location).
28. Measurements were made using TLD dosimeters; values were prorated to 300 hours per year; highest dose was measured at the San Onofre State Beach (Unit 1 North location).
29. Measurements were made using cadmium covered TLD dosimeters; values were prorated to 300 hours per year; highest dose was measured at the San Onofre State Beach (Unit 1 North location).
30. Measurements were made using TLD dosimeters; values were prorated to 300 hours per year; highest dose was measured at the San Onofre State Beach (Unit 1 North location).

SECTION I. 10 CFR 50 APPENDIX I AND 40 CFR 190,
PERCENT TECHNICAL SPECIFICATION LIMITS

The table in Section I corresponds to the table in Section H. Each dose presented in Section H is related to the percent of Technical Specification Limits and this value listed in Section I.

10 CFR 50 APPENDIX I AND 40 CFR 190,
PERCENT TECHNICAL SPECIFICATION LIMITS

		% TSL				
SOURCE		1st Q	2rd Q	3rd Q*	4th Q*	YEAR*
Liquid Effluents	WHOLE BODY	1.91E+0	1.11E+0	3.53E-1	7.43E-1	1.04E+0
	ORGAN	1.35E+1	5.48E+0	2.17E+0	3.02E+0	9.73E+0
Airborne Effluents Iodines and Particulates		5.79E-4	2.13E-1	5.48E-2	1.47E-1	2.06E-1
Noble Gases	GAMMA	1.10E-2	3.34E-1	9.43E-2	1.40E+0	1.04E+0
	BETA	1.65E-2	4.39E-1	1.24E-1	2.03E+0	1.49E+0
Direct Radiation		**	**	**	**	2.61E-2

* The dose limits for the third and fourth quarter were increased a factor of two reflecting the fact that SONGS Unit 3 went critical during the third quarter. Dose limits for the year also reflect the fact that SONGS Unit 3 went critical during the third quarter.

** These sections were left intentionally blank since the 40 CFR 190 limit is based on a "per year" basis only.

SECTION J. MISCELLANEOUS

On August 4, 1983, Units 2 and 3 waste gas header monitor, 2/3RI-7814, exceeded its allowed 14 days out-of-service reporting requirement. The reason was a high background due to contamination.

On August 8, 1983, Units 2 and 3 liquid radwaste discharge monitor, 2/3RI-7813, exceeded its allowed 14 days out-of-service reporting requirement. The reason was a high background due to contamination.

On August 19, 1983, the process flow monitor associated with the Unit 3 plant vent stack wide range gas monitor, 3RI-7865, exceeded its allowed 30 days out-of-service reporting requirement. The reason was due to a wind tunnel testing unit calibration which took an inordinate amount of the time.

On August 19, 1983, Units 2 and 3 waste gas header monitor, 2/3RI-7814, exceeded its allowed 14 days out-of-service reporting requirement. The reason was due to over pressurization of the detectors and resulted in their destruction. The units were repaired but were held out-of-service until a design change package could be generated to correct for the over-pressurization.

On August 21, 1983, the Unit 3 condenser air ejector monitor, 2RI-7818A and 2RI-7818B, exceeded its allowed 30 days out-of-service reporting requirement. The reason was due to the availability of calibration gases.

On September 6, 1983 unplanned but monitored release occurred from the Unit 3 condenser air-ejector. Trace amounts of Xe133 were detected by 3RI-7870, the wide-range gas monitor, for the air ejector. These indications were confirmed by a grab sample. The source of the activity was traced to the Radwaste Steam Condensate Return Tank, Tank T-210, which had received activity due to blow back from tank T-063. Routing the contents of T-210 to Radwaste, instead of the Condenser, stopped the release.

On October 19, 1983, an unplanned but monitored release occurred through the plant vent stack. Integration of activity released was performed using the strip chart recorder paper for 2RI-7685 and 3RI-7865, plant vent stack wide-range gas monitors, and 2/3RI-7808, plant vent stack monitor, 43 curies of Xe-133 were determined to have been released. Possible source of the release into the Radwaste Building and traces into the PVS were a loop seal on the Waste Gas Decay Tank Sample System moisture separator and/or the lifting of two relief header drain valves during venting of the Spent Resin tank.

On November 30, 1983, the Unit 3 condenser air ejector monitor, 2RI-7818A and 2RI-7818B, exceeded its allowed 30 days out-of-service reporting requirement. The reason was that the detector was destroyed during calibration.

On December 19, 1983, the Unit 2 condenser air ejector wide-range gas monitor, 2-RI-7870, exceeded its allowed 30 days out-of-service reporting requirement. The reason was the installation of design change packages.

During the 3rd quarter, unplanned but monitored releases by the plant vent stack were evaluated from strip chart recorder paper for the plant vent stack monitors and totaled $1.28\text{E}+2$ Curies of Xe-133. This activity has been included in the total releases and has been included in the appropriate dose calculations.

During the 4th quarter, unplanned but monitored releases by the plant vent stack were evaluated from strip chart recorder paper for the plant vent stack monitors and totaled $2.16\text{E}+3$ Curies of Xe-133. This activity has been included in the total releases and has been included in the appropriate dose calculations.

SECTION K. CONCLUSION

- Radioactive releases totaled $7.15\text{E}+3$ Curies for gaseous effluents and $2.12\text{E}+2$ Curies for liquid effluents.
- Gaseous releases were primarily noble gases and totaled $7.13\text{E}+3$ Curies of which 98.3% was Xe-133.
- Liquid releases were primarily tritium and accounted for $2.08\text{E}+2$ Curies or 98.1% of the total.
- There were 6 radwaste shipments for SONGS 2/3 to Richland, Washington. There were 128.5 cubic meters of solid radwaste shipped containing 7.48 Curies of radioactivity.
- Meteorological conditions during the year were typical of the meteorology at SONGS 2/3. Meteorological dispersion was good 32% of the time, fair 43% of the time, and poor 25% of the time.
- Compliance with 40CRF 190 dose limits have been demonstrated in Section H of this report and there are no other fuel cycle facilities within 8 kilometers.
- For liquid releases, marine sample analyses will indicate if any radioactive material has concentrated in marine life. However, detection of any tritium in these samples is not expected because of the rapid turnover of water in marine life and because of the bulk of ocean water available for dilution.
- The net results from the analysis of these effluent releases indicate the operation of SONGS 2/3 has not produced any detrimental effect on the environment.

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Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

P.O. BOX 128

SAN CLEMENTE, CALIFORNIA 92672

J. G. HAYNES
STATION MANAGER

March 22, 1984

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U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596-5368

Attention: Mr. J. B. Martin, Regional Administrator

Dear Sir:

Subject: Docket Nos. 50-361 and 50-362
Semiannual Radioactive Effluent Release Report
San Onofre Nuclear Generating Station, Units 2 and 3

Reference: Letter, J. G. Haynes (SCE) to J. B. Martin (NRC),
dated February 29, 1984, Semiannual Radioactive Effluent
Release Report, Docket Nos. 50-361 and 50-362

Sections 6.9.1.8 and 6.9.1.9 of Appendix A to Technical Specifications for Facility Operating License Nos. NPF-10 and NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively, require a semiannual report of the radioactive content of effluents released to unrestricted areas and shipments of solid waste during the previous six months be submitted within sixty days after January 1, 1984. The referenced letter stated that due to problems with atmospheric dispersion calculation software for population dose assessment, the semiannual report for July 1, 1983, through December 31, 1983, which is enclosed, would be delayed until March 23, 1984.

This report has been prepared in the general format of NRC Regulatory Guide 1.21, sections pertinent to SONGS 2 and 3. Included in this report are quarterly effluent summaries, percent of Technical Specification Limits, estimated total percent error, lower limit of detection concentrations, 40 CFR 190 considerations, meteorological data and 50 mile radius population doses.

Please contact us if we can be of further assistance.

Sincerely,

J. G. Haynes

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Enclosures: 2 copies

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cc: A. E. Chaffee (USNRC, Resident Inspector Units 1, 2 and 3)
J. P. Stewart (USNRC, Resident Inspector Units 2 and 3)

J. B. Martin (Regional Administrator, USNRC Region V)

Institute of Nuclear Power Operations (INPO)