

SEMIANNUAL EFFLUENT AND WASTE DISPOSAL REPORT

FOR THE OPERATING PERIOD

July 1, 1984 - December 31, 1984

February 28, 1985



V. C. SUMMER NUCLEAR STATION  
SOUTH CAROLINA ELECTRIC AND GAS COMPANY

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# SEMIANNUAL EFFLUENT AND WASTE DISPOSAL REPORT

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South Carolina Electric & Gas

This report is being submitted as a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the Virgil C. Summer Nuclear Station. This report satisfies the requirements in Sections 6.9.1.8 and 6.9.1.9 of Technical Specifications and 10CFR50.36(a). Also included is an assessment of radiation doses from plant releases.

A brief discussion of the Supplemental Information and Tables 1 and 3 through 7 is presented in Sections A through D. An evaluation of the radiological impact on man due to operation of the Virgil C. Summer Nuclear Station is presented in Section E and Table 2. A summary of the meteorological data for 1984 is presented in Section F and Tables 8 and 9. Changes made to the Process Control Program are presented in Section G. Section H contains an explanation of abnormal occurrences during the July-December, 1984 operating period.

## A. Supplemental Information

Regulatory limits for doses and maximum permissible concentrations presented in Supplemental Information are from the Virgil C. Summer Nuclear Station Technical Specifications. Average energy ( $\bar{E}$ ) is not applicable to the method for determining release rate limits for fission and activation gaseous effluents; therefore, it has been omitted.

## B. Gaseous Effluents

Gaseous effluents released from ground level are summarized in Tables 3 and 4. An elevated release pathway does not exist at Virgil C. Summer Nuclear Station. Cumulative doses are discussed in Section E.

The errors for gaseous effluent totals are given as the square root of the sum of squares of counting errors and flow or volume measurement errors. A systematic error of 15% has been added to estimate total error.

## C. Liquid Effluents

Liquid effluents are summarized in Tables 5 and 6. Estimated total errors are expressed as in Section B above.

## D. Solid Waste Shipments

Solid waste shipments are summarized in Table 7. The twenty-one (21) shipments during this reporting period are described on the following page in Table 1.

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Table 1

## SOLID WASTE SHIPMENTS

DATE	WASTE TYPE
07-11-84	120/55-gallon drums and 2 B-25 boxes, Class A, dry active waste; Radioactive Material-LSA.
07-18-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
08-01-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
08-03-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
08-16-84	1 conical bottom HIC containing dewatered resins, Class A waste; Radioactive Material-LSA.
08-22-84	113/55-gallon drums and 2 B-25 boxes, Class A, dry active waste; Radioactive Material-LSA.
08-23-84	1 conical bottom HIC containing dewatered resins, Class A waste; Radioactive Material-LSA.
08-28-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
08-29-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
08-30-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
08-31-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
09-13-84	1 conical bottom HIC containing dewatered resins, Class A waste; Radioactive Material-LSA
09-14-84	1 carbon steel liner containing solidified evaporator bottoms; Class A waste; Radioactive Material-LSA
10-02-84	1 carbon steel liner containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
10-05-84	80/55-gallon drums and 4 B-25 boxes, Class A, dry active waste; Radioactive Material-LSA.
10-10-84	1 foam-lined conical bottom HIC containing process filters, Class A waste; Radioactive Material-LSA
10-12-84	1 conical bottom HIC containing dewatered resins, Class A waste; Radioactive Material-LSA
11-02-84	134/55-gallon drums and 4 B-25 boxes, Class A, dry active waste; Radioactive Material-LSA
11-16-84	96/55-gallon drums and 6 B-25 boxes, Class A, dry active waste; Radioactive Material-LSA.
11-20-84	2 carbon steel liners containing solidified evaporator bottoms, Class A waste; Radioactive Material-LSA
11-30-84	110/55-gallon drums and 6 B-25 boxes, Class A, dry active waste; Radioactive Material-LSA

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The conservative method for curie content determination is based on contact dose rates measured around the perimeter of the respective packages. The estimated total error is determined to be the sum of a 15% systematic error and a 20% photon response error for the detector used.

## E. Radiological Impact on Man

Potential doses to the maximum exposed individual in the unrestricted area were calculated using measured plant gaseous effluent and meteorological data in accordance with the Offsite Dose Calculation Manual. Included in the source term were three (3) waste gas batch releases, ten (10) containment purges and a continuous six month main plant vent release. The total curies released are presented in Tables 1 and 2. Air doses to an individual due to noble gases were  $2.44\text{E-}3$  and  $3.64\text{E-}3$  mrad for gamma and beta respectively. The maximum organ dose attributed to the releases was  $3.45\text{E-}5$  mrem for the six month period. Cumulative annual doses were  $3.72\text{E-}3$  mrad,  $5.23\text{E-}3$  mrad and  $1.52\text{E-}4$  mrem for gamma, beta and organ dose, respectively.

Measured plant liquid effluent data was used to calculate estimates of doses to individuals in accordance with the Offsite Dose Calculation Manual. The source term consisted of the isotopic contents of each of the 233 liquid effluent batch releases from Waste Monitor Tanks, Steam Generator Blowdowns, Condensate Demineralizer Backwash, and a continuous Turbine Building Sump release. The total radioactivity released is described in Tables 3 and 4. The total body dose to the maximally exposed individual due to the radioactive liquid released was  $1.22\text{E-}2$  mrem. The maximum organ dose was  $5.06\text{E-}2$  mrem to the Gastrointestinal Tract and Lower Large Intestine (GI-LLI). Cumulative annual doses were  $1.73\text{E-}2$  mrem and  $2.72\text{E-}1$  mrem, respectively, for the hypothetical maximally exposed individual.

Radiation doses from nearby uranium fuel cycle sources were not assessed. Technical Specifications, Section 3/4.11.4, page B 3/4 11-6 establishes a five (5) mile limit beyond which doses from nearby plants are insignificant. There are no uranium fuel cycle plants within a five (5) mile radius of Virgil C. Summer Nuclear Station.

Radiation doses from radioactive effluents to members of the public due to their activities inside the site boundary were assessed in a manner different from that in the Offsite Dose Calculation Manual. Monthly thermoluminescent dosimetry data from eight (8) monitoring locations within the site boundary and ten (10) locations around the site boundary perimeter were analyzed and compared with respective pre-operational background history. Results showed that 1984 monthly dose rates did not differ significantly from the pre-operational dose rates. It was concluded that doses to members of the public inside the site boundary were indistinguishable from normal background dose resulting from a dose rate of  $7.9\text{E-}3$  mrem per hour and were, therefore, insignificant.

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Radiation doses from radioactive effluents to workers at the Fairfield Hydro Station were determined to be  $3.33\text{E-}4$  and  $4.97\text{E-}4$  mrad for gamma and beta, respectively. Annual cumulative doses were  $5.08\text{E-}4$  and  $7.14\text{E-}4$  mrad, respectively.

Accumulated doses due to gaseous and liquid effluents and respective Technical Specification limits are summarized as follows:

Table 2

## GASEOUS AND LIQUID DOSES

Tech Spec Section	Gaseous Limits	Third Quarter, 1984		Fourth Quarter, 1984	
		Actual	Percent of Limit	Actual	Percent of Limit
3.11.2.2a,b	5 mrad gamma/qtr. 10 mrad gamma/yr.	$2.36\text{E-}3$ mrad	$4.72\text{E-}2$ $3.64\text{E-}2^*$	$7.53\text{E-}5$ mrad	$1.51\text{E-}3$ $3.72\text{E-}2^*$
3.11.2.2a,b	10 mrad beta/qtr. 20 mrad beta/yr.	$3.44\text{E-}3$ mrad	$3.44\text{E-}2$ $2.52\text{E-}2^*$	$2.04\text{E-}4$ mrad	$2.04\text{E-}3$ $2.62\text{E-}2^*$
3.11.2.3a,b	7.5 mrem/organ/qtr. 15 mrem/organ/yr.	$2.57\text{E-}5$ mrem	$3.43\text{E-}4$ $9.51\text{E-}4^*$	$8.77\text{E-}6$ mrem	$1.17\text{E-}4$ $1.01\text{E-}3^*$
	<u>Liquid Limits</u>				
3.11.1.2a,b	1.5 mrem/qtr. 3.0 mrem/yr.	$1.73\text{E-}3$ mrem	$1.15\text{E-}1$ $2.27\text{E-}1^*$	$1.05\text{E-}2$ mrem	$7.02\text{E-}1$ $5.77\text{E-}1^*$
3.11.1.2a,b	5 mrem/organ/qtr. 10 mrem/organ/yr.	$2.35\text{E-}2$ mrem	$4.70\text{E-}1$ $2.45\text{E+}0^*$	$2.71\text{E-}2$ mrem	$5.42\text{E-}1$ $2.72\text{E+}0^*$

\* Includes contribution from previous quarters.

Dose rates and concentrations were below the limits specified in Supplemental Information, Section 2a, b and c during all the effluent releases.

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## F. Meteorology

The meteorological data for 1984 is summarized in Table 8. The data is shown as joint frequency distribution of wind direction and speed by atmospheric stability class. Table 9 provides the same information for those hours during which batch releases occurred.

The wind data used in the summary was acquired from the 10 meter level of the primary monitoring tower. Stability was determined by the primary differential temperature (61 to 10 meter). During periods in which the primary indicator was not available the secondary indicator (40 to 10 meter differential temperature) was used.

The combined annual data recovery for wind direction, wind speed, and stability was 90%. Primary variable recovery rates were as follows: wind direction (10m) - 95%, wind speed (10 m) - 93%, differential temperature (61-10m) - 96%, differential temperature (40-10m) - 98%. These low recovery rates are attributed to lightning and hail damage sustained during several severe thunderstorms.

## G. Process Control Program

The Virgil C. Summer Nuclear Station (VCSNS) Process Control Program (PCP) was modified in July, 1984 to reflect minor changes in the dewatering process for 24 inch diameter pressure demineralizer vessels. The overall conformance of the solidified waste product to existing criteria for solid wastes has not been adversely affected by the changes incorporated in the VCSNS PCP. Per Technical Specification requirement 6.13.2.1.c, the PSRC has reviewed and approved the revision (Rev. 3, Change A) which is enclosed as Attachment I. See page 1, Procedure Development Form - A, Section VII, for the PSRC approval signature.

## H. Abnormal Occurrences Affecting Effluent Release Data

One abnormal release occurred during the July-December, 1984 operating period. On December 17, 1984, approximately 300 gallons of liquid waste was released to the Fairfield Hydro Penstocks as described in LER 84-048. The approximate activity concentration (non-tritium) of the liquid release was estimated (conservatively) to be  $1.2E-3$  uCi/ml from the affected monitor readings taken during the release. The total (non-tritium) activity released was then approximated to be  $1.36E-3$  Ci of which  $9.6E-4$ ,  $2.9E-4$ , and  $7.5E-5$  Ci were expected to be from Co-58, Co-60, and Mn-54, respectively, based on the applicable nuclide ratios available at that time. Tritium activity was estimated to be  $2.82E-2$  Ci. The total body dose to the maximally exposed individual was estimated to be  $5.2E-7$  mrem while the maximum organ dose estimate was  $3.7E-6$  mrem (GI-LLI). These insignificant activities and doses have been included in the total liquid release values for the six-month period.

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1. Regulatory Limits:

a. Fission and Activation Gases:

The air dose to an individual due to noble gases released in gaseous effluents shall be limited to less than or equal to 5 mrad for gamma radiation and 10 mrad for beta radiation during any calendar quarter and 10 mrad for gamma radiation and 20 mrad for beta radiation during any calendar year (Technical Specifications, Section 3.11.2.2).

b. Iodines, Particulates (half-lives > 8 days) and Tritium:

The dose to an individual from radioiodines, tritium and radioactive materials in particulate form with half-lives greater than 8 days in gaseous effluents shall be limited to less than or equal to 7.5 mrem to any organ during any calendar quarter and 15 mrem to any organ during any calendar year (Technical Specifications, Section 3.11.2.3).

c. Liquid Effluents:

The dose or dose commitment to an individual from radioactive materials in liquid effluents released shall be limited to less than or equal to 1.5 mrem to the total body and 5 mrem to any organ during any calendar quarter and 3 mrem to the total body and 10 mrem to any organ during any calendar year (Technical Specifications, Section 3.11.1.2).

2. Maximum Permissible Concentrations:

a. Fission and Activation Gases:

The dose rate in unrestricted areas due to radioactive materials released in gaseous effluents shall be limited to less than or equal to 500 mrem/year to the total body and less than or equal to 3000 mrem/year to the skin (Technical Specifications, Section 3.11.2.1).

b. Iodines, Particulates (half-lives > 8 days) and Tritium:

The dose rate in unrestricted areas due to radioactive materials in effluents shall be limited to less than or equal to 1500 mrem/year to any organ (Technical Specifications, Section 3.11.2.1).

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c. Liquid Effluents:

The concentration of radioactive materials released from the site shall be limited to the concentrations specified in 10 CFR 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to  $2E-4$  uCi/ml total activity (Technical Specifications, Section 3.11.1.1).

3. Average Energy:

Not Applicable

4. Measurements and Approximations of Total Radioactivity:

- a. Fission and activation gases: Gamma spectrometry (GeLi or HPGe)
- b. Iodines: Gamma spectrometry (GeLi or HPGe)
- c. Particulates: Gamma spectrometry (GeLi or HPGe), beta proportional counting, alpha proportional counting
- d. Tritium: Liquid scintillation
- e. Liquid effluents: Gamma spectrometry (GeLi or HPGe), liquid scintillation (H-3), beta proportional counting, alpha proportional counting

5. Batch Releases:

a. Liquid:

1. Number of batch releases:

120 for third quarter, 1984  
113 for fourth quarter, 1984

2. Total time period for batch releases:

7796 min. for third quarter, 1984  
6860 min. for fourth quarter, 1984



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3. Maximum time period for a batch release:

125 min. for third quarter, 1984  
100 min. for fourth quarter, 1984

4. Average time period for batch releases:

65 min. for third quarter, 1984  
61 min. for fourth quarter, 1984

5. Minimum time period for a batch release:

43 min. for third quarter, 1984  
37 min. for fourth quarter, 1984

6. Average stream flow during periods of release of effluent into a flowing stream:

4.16E+6 gpm for third quarter, 1984  
3.78E+6 gpm for fourth quarter, 1984

b. Gaseous:

1. Number of batch releases: 13
2. Total time period for batch releases: 13238 min.
3. Maximum time period for a batch release: 1419 min.
4. Average time period for a batch release: 1018 min.
5. Minimum time period for a batch release: 20 min.

6. Abnormal Releases:

a. Liquid:

1. Number of releases: 1
2. Total activity released: 2.96E-2 Ci (estimated maximum-principally Tritium)

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b. Gaseous:

1. Number of releases: 0
2. Total activity released: 0

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Table 3

## GASEOUS EFFLUENTS--SUMMATION OF ALL RELEASES

Third Quarter	Fourth Quarter	Est.Total Error, %
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## A. Fission &amp; activation gases

		Third Quarter	Fourth Quarter	Est.Total Error, %
1. Total release	Ci	1.06E+1	1.11E+0	1.91E+1
2. Average release rate for period	uCi/sec	1.34E+0	1.40E-1	
3. Percent of technical specification limit	%	*	*	

## B. Iodines

		Third Quarter	Fourth Quarter	Est.Total Error, %
1. Total iodine-131	Ci	0	0	3.38E+1
2. Average release rate for period	uCi/sec	0	0	
3. Percent of technical specification limit	%	**	**	

## C. Particulates

		Third Quarter	Fourth Quarter	Est.Total Error, %
1. Particulates with half-lives > 8 days	Ci	0	5.04E-6	5.28E+1
2. Average release rate for period	uCi/sec	0	6.34E-7	
3. Percent of technical specification limit	%	**	**	
4. Gross alpha radioactivity	Ci	0	0	

## D. Tritium

		Third Quarter	Fourth Quarter	Est.Total Error, %
1. Total release	Ci	4.70E-2	1.67E-2	2.99E+1
2. Average release rate for period	uCi/sec	5.91E-3	2.10E-3	
3. Percent of technical specification limit	%	**	**	

\* Calculated as a percent of dose limits found in Supplemental Information, Section 1a. Third quarter values were 4.72E-2% and 3.52E-2% of the quarterly and cumulative annual gamma dose limits, respectively and 3.44E-2% and 2.45E-2% of the quarterly and cumulative annual beta dose limits, respectively. Fourth quarter values were 1.51E-3% and 3.60E-2% of the quarterly and cumulative annual gamma dose limits, respectively, and 2.04E-3% and 2.55E-2% of the quarterly and cumulative annual beta dose limits, respectively.

\*\* Calculated as a percent of dose limits found in Supplemental Information, Section 1b. The sum of these values for the third quarter was 3.43E-4% and 9.52E-4% of the quarterly and cumulative annual organ dose limits, respectively. The sum of these values for the fourth quarter was 1.17E-4% and 1.01E-3% of the quarterly and cumulative annual organ dose limits, respectively.

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Table 4

## GASEOUS EFFLUENTS-GROUND-LEVEL RELEASES

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		Third Quarter	Fourth Quarter	Third Quarter	Fourth Quarter

## 1. Fission gases

krypton-85	Ci	0	0	0	0
krypton-85m	Ci	0	0	0	0
krypton-87	Ci	0	0	0	0
krypton-88	Ci	0	0	0	0
xenon-133	Ci	7.35E-1	3.63E-1	3.25E+0	7.10E-1
xenon-135	Ci	6.56E+0	3.61E-2	9.85E-2	0
xenon-135m	Ci	0	0	0	0
xenon-138	Ci	0	0	0	0
Others: None	Ci	0	0	0	0
unidentified	Ci	0	0	0	0
Total for period	Ci	7.29E+0	3.99E-1	3.35E+0	7.10E-1

## 2. Iodines

iodine-131	Ci	0	0	0	0
iodine-133	Ci	1.40E-6	0	0	0
iodine-135	Ci	0	0	0	0
Total for period	Ci	1.40E-6	0	0	0

## 3. Particulates

strontium-89	Ci	0	0	0	0
strontium-90	Ci	0	0	0	0
cesium-134	Ci	0	0	0	0
cesium-137	Ci	0	0	0	0
barium-lanthanum-140	Ci	0	0	0	0
Others: Co-58	Ci	0	5.04E-6	0	0
unidentified	Ci	0	0	0	0
Total for period	Ci	0	5.04E-6	0	0

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Table 5

## LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

Unit	Third Quarter	Fourth Quarter	Est.Total Error, %
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## A. Fission &amp; activation products

1. Total release (not including tritium, gases, alpha)	Ci	4.96E-1	5.18E-1	1.93E+1
2. Average diluted concentration during period	uCi/ml	1.40E-9	2.70E-9	
3. Percent of applicable limit	%	*	*	

## B. Tritium

1. Total release	Ci	8.14E+1	3.82E+1	1.80E+1
2. Average diluted concentration during period	uCi/ml	2.30E-7	1.99E-7	
3. Percent of applicable limit	%	*	*	

## C. Dissolved and entrained gases

1. Total release	Ci	3.04E-2	0	3.82E+1
2. Average diluted concentration during period	uCi/ml	8.59E-11	0	
3. Percent of applicable limit	%	*	*	

## D. Gross alpha radioactivity

1. Total release	Ci	0	0	3.81E+1
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E. Volume of waste released (prior to dilution)	liters	4.96E+7	4.42E+7	3.00E+0
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F. Volume of dilution water used during period	liters	3.53E+11	1.92E+11	4.30E+0
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\* See following page.

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Table 5

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

- \* Calculated as a percent of dose limits found in Supplemental Information, Section 1c. The sum of these values for the third quarter was 1.16E-1% and 2.28E-1% of the respective quarterly and cumulative annual whole body dose limits and 6.19E-1% and 2.65% of the respective quarterly and cumulative annual organ dose limits. The sum of these values for the fourth quarter was 7.02E-1% and 5.79E-1% of the respective quarterly and cumulative annual whole body dose limits and 1.36% and 3.33% of the respective quarterly and cumulative annual organ dose limits. Dose to the GI-LLI was the most limiting organ dose for the third and fourth quarters of 1984.

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Table 6

## LIQUID EFFLUENTS

Nuclides Released †	Unit	Continuous Mode		Batch Mode	
		Third Quarter	Fourth Quarter	Third Quarter	Fourth Quarter
strontium-89	Ci	0	0	9.33E-5	9.10E-6
strontium-90	Ci	0	0	0	0
cesium-134	Ci	0	0	0	4.38E-5
cesium-137	Ci	0	0	0	8.93E-6
iodine-131	Ci	2.19E-4	0	6.56E-4	5.46E-6
cobalt-58	Ci	0	0	2.85E-1	3.45E-1
cobalt-60	Ci	0	0	6.99E-2	9.66E-2
iron-59	Ci	0	0	3.73E-3	2.91E-3
zinc-65	Ci	0	0	6.51E-4	9.37E-4
manganese-54	Ci	0	0	2.65E-2	2.49E-2
chromium-51	Ci	0	0	2.91E-2	1.75E-2
zirconium-niobium-95	Ci	0	0	1.27E-2	7.25E-3
molybdenum-99	Ci	0	0	7.68E-7	6.37E-8
technetium-99m	Ci	0	0	2.54E-4	5.12E-5
barium-lanthanum-140	Ci	0	0	5.22E-5	3.27E-6
cerium-141	Ci	0	0	0	0
Other: Na-24	Ci	3.61E-3	0	5.76E-3	1.98E-5
*Ar-41	Ci	0	0	2.64E-5	0
Fe-55	Ci	0	0	4.85E-2	9.54E-3
*Ni-56	Ci	0	0	0	5.32E-8
*Co-57	Ci	0	0	7.43E-4	1.12E-3
Zn-69m	Ci	0	0	1.55E-6	9.33E-6
Rb-88	Ci	6.02E-4	0	2.41E-4	0
*Nb-97	Ci	0	0	0	5.04E-6
Zr-97	Ci	0	0	1.90E-5	0
Ag-110m	Ci	0	0	2.40E-3	0
*Sn-113	Ci	0	0	7.56E-5	3.40E-5
*Sb-124	Ci	0	0	4.11E-4	3.40E-3
*Sb-125	Ci	0	0	3.27E-4	9.29E-3
I-132	Ci	0	0	1.03E-3	0
I-133	Ci	6.93E-4	0	1.24E-3	2.01E-5
*Ba-133	Ci	0	0	7.19E-6	0
I-135	Ci	0	0	2.79E-4	0
Ce-144	Ci	0	0	6.15E-4	3.07E-5
W-187	Ci	0	0	3.81E-4	7.69E-5
Np-239	Ci	0	0	4.68E-5	0
Total for period (above)	Ci	5.12E-3	0	4.91E-1	5.18E-1

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Table 6 (Continued)

## LIQUID EFFLUENTS

Nuclides Released	Unit	Continuous Mode		Batch Mode	
		Third Quarter	Fourth Quarter	Third Quarter	Fourth Quarter
xenon-133	Ci	7.39E-5	0	1.09E-2	0
xenon-135	Ci	2.11E-4	0	1.84E-2	0
Other: Kr-85m	Ci	0	0	3.33E-4	0
Kr-88	Ci	0	0	3.23E-4	0
Kr-87	Ci	0	0	1.64E-5	0
Xe-133m	Ci	0	0	1.15E-4	0

† Tritium not included. See Table 5 for tritium numbers.

\* Dose factors for these trace radionuclides are not included in the ODCM or Regulatory Guide 1.109, consequently the cumulative dose attributed to these isotopes is not reported. The quantity of these isotopes comprised only 1.94E-3% and 3.29E-2% of the total curies released (including tritium) during the third and fourth quarter, respectively.



## SEMIANNUAL EFFLUENT AND WASTE DISPOSAL REPORT

July - December, 1984

Table 7

## 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 <sup>3</sup> Ci	1.16E+2 8.18E+1	3.50E+1
b. Dry compressible waste, contaminated equip., etc.	m <sup>3</sup> Ci	2.05E+2 1.31E+0	3.50E+1
c. Irradiated components, control rods, etc.	m <sup>3</sup> Ci	0 0	0
d. Other (describe) Process Filters	m <sup>3</sup> Ci	2.38E+0 1.97E+0	3.50E+1

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

a. Co-58	%	5.25E+1
Co-60	%	1.41E+1
H-3	%	1.04E+1
Mn-54, Fe-55, Cr-51, Ni-63, C-14	%	2.05E+1
Nb-95, Zr-95, Fe-59	%	1.89E+0
b. Co-58	%	4.12E+1
Fe-55	%	2.77E+1
Co-60	%	1.43E+1
Mn-54, Cr-51, Ni-63, Nb-95, Fe-59	%	1.47E+1
C-14, Zr-95, Cs-137	%	1.63E+0
c. NONE	%	0
d. Co-58	%	3.04E+1
Fe-55	%	2.64E+1
Mn-54	%	1.36E+1
Co-60	%	1.15E+1
Zr-95, Cr-51, Nb-95, Ni-63, Fe-59	%	1.78E+1

\* All nuclides are listed in descending order by activity level.  
All nuclides with concentrations above 0.25% are listed.

## 3. Solid Waste Disposition (6 month period)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
21	Truck	Barnwell, S.C.

## B. Irradiated Fuel Shipments (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
NONE		

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	4	0	0	4	15.85
NNE	0	0	1	0	1	0	2	14.96
NE	1	0	2	0	0	0	3	7.97
ENE	0	0	1	0	0	0	1	10.10
E	0	1	0	0	0	0	1	5.30
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	1	0	0	0	1	9.80
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	1	0	0	0	1	10.30
SW	0	0	0	0	0	0	0	0.00
WSW	0	1	1	0	0	0	2	6.93
W	0	2	0	0	0	0	2	4.86
WNW	0	2	0	0	0	0	2	5.81
NW	0	1	1	0	0	0	2	7.85
NNW	0	2	0	0	0	0	2	5.40
Total	1	9	8	4	1	0	23	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 1  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	1	0	3	1	1	0	6	10.65
NNE	0	0	3	1	4	0	8	15.73
NE	0	1	1	0	0	0	2	8.85
ENE	0	2	2	0	0	0	4	7.01
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	1	0	0	0	0	1	7.99
SSE	0	0	1	2	0	0	3	12.90
S	0	0	1	0	0	0	1	10.90
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	1	0	0	0	0	1	4.78
W	0	1	0	0	0	0	1	6.12
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	2	0	0	0	0	2	7.17
Total	1	8	11	4	5	0	29	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 1  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: C  $\Delta T / \Delta z$

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	1	3	1	0	0	5	10.89
NNE	0	2	5	8	5	0	20	15.21
NE	2	3	3	5	0	0	13	11.00
ENE	0	4	0	0	0	0	4	4.70
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	1	0	0	0	1	9.11
SSE	0	2	0	1	0	0	3	10.82
S	0	1	1	0	0	0	2	7.46
SSW	0	0	1	0	0	0	1	8.34
SW	0	0	1	1	0	0	2	12.14
WSW	0	0	1	2	0	0	3	13.93
W	0	2	0	0	0	0	2	4.88
WNW	1	1	0	0	0	0	2	4.05
NW	0	3	1	0	0	0	4	6.73
NNW	0	3	3	0	0	0	6	8.47
Total	3	22	20	18	5	0	68	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 13  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	9	15	11	3	0	0	38	7.40
NNE	10	24	15	20	0	0	69	9.10
NE	5	20	51	16	0	0	92	9.97
ENE	2	24	28	6	0	0	60	8.94
E	5	28	11	0	0	0	44	6.68
ESE	1	9	22	2	0	0	34	8.86
SE	1	13	18	3	1	0	36	9.39
SSE	5	10	17	7	2	0	41	10.05
S	2	14	16	4	0	0	36	8.70
SSW	4	20	10	2	0	1	37	7.78
SW	11	29	18	5	0	0	63	7.55
WSW	7	34	31	24	5	0	101	10.17
W	8	31	38	12	1	0	90	8.94
WNW	9	21	15	7	0	0	52	8.01
NW	6	15	9	7	0	0	37	8.30
NNW	8	13	10	2	1	0	34	6.95
Total	93	320	320	120	10	1	864	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 218  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	11	15	2	0	0	0	28	4.82
NNE	7	15	4	0	0	0	26	5.53
NE	3	13	6	0	0	0	22	6.41
ENE	4	9	1	0	0	0	14	5.55
E	3	25	1	0	0	0	29	5.70
ESE	4	14	0	0	0	0	18	5.19
SE	4	25	5	0	0	0	34	6.15
SSE	4	31	5	0	0	0	40	5.92
S	9	19	3	0	0	0	31	5.21
SSW	6	13	9	0	0	0	28	5.89
SW	9	41	13	1	0	0	64	6.41
WSW	5	34	11	0	0	0	50	6.20
W	9	22	5	0	0	0	36	5.41
WNW	8	12	4	0	0	0	24	5.38
NW	6	5	0	0	0	0	11	4.34
NNW	4	6	5	0	0	0	15	6.82
Total	96	299	74	1	0	0	470	

Hours of Calm : 5  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 89  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	1	5	0	0	0	0	6	4.93
NNE	0	4	0	0	0	0	4	5.36
NE	1	2	0	0	0	0	3	4.14
ENE	2	6	0	0	0	0	8	4.91
E	0	4	0	0	0	0	4	6.27
ESE	5	3	1	0	0	0	9	4.81
SE	3	19	1	0	0	0	23	6.48
SSE	6	16	1	0	0	0	23	5.18
S	1	15	1	0	0	0	17	5.53
SSW	3	14	0	0	0	0	17	4.85
SW	4	14	0	0	0	0	18	4.70
WSW	5	11	0	0	0	0	16	4.34
W	6	2	0	0	0	0	8	3.68
WNW	9	4	0	0	0	0	13	3.56
NW	4	4	0	0	0	0	8	4.08
NNW	1	3	0	0	0	0	4	4.77
Total	51	126	4	0	0	0	181	

Hours of Calm : 5  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 26  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	2	3	0	0	0	0	5	5.15
ENE	4	2	0	0	0	0	6	4.03
E	3	2	0	0	0	0	5	4.00
ESE	0	0	0	0	0	0	0	0.00
SE	4	13	1	0	0	0	18	5.36
SSE	6	17	1	0	0	0	24	5.02
S	13	4	0	0	0	0	17	3.42
SSW	9	6	0	0	0	0	15	3.41
SW	12	2	0	0	0	0	14	3.16
WSW	8	3	0	0	0	0	11	3.60
W	12	11	0	0	0	0	23	3.66
WNW	10	4	0	0	0	0	14	3.65
NW	4	1	0	0	0	0	5	3.37
NNW	0	0	0	0	0	0	0	0.00
Total	87	68	2	0	0	0	157	

Hours of Calm : 18  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 11  
 Hours of Missing Data for All : 360  
 Hours of No Stability Class : 5  
 Total hours of observation : 2184



SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	22	36	19	9	1	0	87	7.21
NNE	17	45	28	29	10	0	129	9.71
NE	14	42	63	21	0	0	140	9.15
ENE	12	49	32	6	0	0	99	7.56
E	11	62	12	0	0	0	85	6.17
ESE	10	26	23	2	0	0	61	7.18
SE	12	71	27	3	1	0	114	7.19
SSE	21	76	25	10	2	0	134	7.16
S	25	53	22	4	0	0	104	6.27
SSW	22	53	21	2	0	1	99	6.11
SW	36	86	32	7	0	0	161	6.46
WSW	25	84	44	26	5	0	184	8.19
W	35	71	43	12	1	0	162	7.03
WNW	37	44	19	7	0	0	107	6.19
NW	20	29	11	7	0	0	67	6.67
NNW	13	29	18	2	1	0	63	6.88
Total	332	856	439	147	21	1	1796	

Hours of Calm : 28  
Hours of Varying Wind Direction : 0  
Hours of Missing Data for All : 360  
Hours of No Stability Class : 5  
Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	2	0	2	0	0	4	10.43
NNE	0	1	7	0	0	0	8	9.98
NE	0	3	0	0	0	0	3	5.77
ENE	0	3	0	0	0	0	3	6.39
E	0	2	0	0	0	0	2	5.83
ESE	0	2	0	0	0	0	2	7.18
SE	0	0	0	0	0	0	0	0.00
SSE	0	1	2	0	0	0	3	9.25
S	0	0	0	0	0	0	0	0.00
SSW	0	1	0	0	0	0	1	4.57
SW	0	0	0	0	0	0	0	0.00
WSW	1	0	0	0	0	0	1	3.72
W	0	0	0	0	0	0	0	0.00
WNW	0	1	0	0	0	0	1	5.10
NW	1	0	0	0	0	0	1	3.50
NNW	1	1	0	0	0	0	2	4.67
Total	3	17	9	2	0	0	31	

Hours of Calm : 2  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 5  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	1	0	0	0	0	1	7.56
NNE	2	2	1	0	1	0	6	8.29
NE	2	3	0	0	0	0	5	4.68
ENE	2	4	1	0	0	0	7	5.24
E	1	0	1	0	0	0	2	6.07
ESE	0	3	0	0	0	0	3	6.11
SE	0	1	2	0	0	0	3	7.88
SSE	1	0	1	0	0	0	2	7.51
S	0	0	0	1	0	0	1	16.50
SSW	0	2	0	0	0	0	2	5.28
SW	0	1	2	0	0	0	3	8.78
WSW	0	0	0	1	0	0	1	13.02
W	1	0	0	0	0	0	1	2.93
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	9	17	8	2	1	0	37	

Hours of Calm : 1  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 5  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: C delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	1	0	0	1	2	0	4	15.71
NNE	2	3	1	4	4	0	14	12.81
NE	2	7	1	4	0	0	14	8.41
ENE	2	6	5	0	0	0	13	6.65
E	0	2	1	0	0	0	3	7.61
ESE	0	1	0	0	0	0	1	4.19
SE	0	3	0	0	0	0	3	5.64
SSE	0	0	1	0	0	0	1	11.20
S	0	1	2	1	1	0	5	12.70
SSW	0	2	1	0	0	0	3	6.38
SW	0	4	1	0	0	0	5	5.91
WSW	0	2	1	1	0	0	4	8.98
W	2	0	0	0	0	0	2	3.54
WNW	0	2	2	0	0	0	4	7.20
NW	0	1	0	0	0	0	1	5.35
NNW	2	1	0	0	0	0	3	4.63
Total	11	35	16	11	7	0	80	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 8  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: D  $\Delta T / \Delta z$ 

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	10	12	15	12	0	0	49	9.17
NNE	11	25	21	22	2	0	81	9.85
NE	7	30	28	16	0	0	81	9.18
ENE	2	26	29	6	1	0	64	8.99
E	2	19	16	6	0	0	43	8.60
ESE	2	21	10	0	0	0	33	6.70
SE	2	22	7	0	0	0	31	6.14
SSE	2	51	35	4	0	0	92	7.90
S	5	50	39	6	2	0	102	8.39
SSW	5	43	26	4	0	1	79	7.73
SW	7	66	31	5	0	0	109	7.21
WSW	6	82	58	18	0	0	164	8.33
W	8	15	33	18	0	0	74	9.56
WNW	6	16	9	3	0	0	34	7.56
NW	4	9	5	2	0	0	20	7.34
NNW	8	4	12	6	0	0	30	8.69
Total	87	491	374	128	5	1	1086	

Hours of Calm : 1  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 43  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	6	16	0	2	0	0	24	5.69
NNE	6	17	5	2	0	0	30	6.14
NE	4	4	4	0	0	0	12	6.49
ENE	2	6	8	0	0	0	16	7.52
E	2	11	2	0	0	0	15	6.12
ESE	5	12	3	0	0	0	20	5.68
SE	5	17	6	0	0	0	28	5.86
SSE	9	59	8	0	0	0	76	5.88
S	12	66	12	0	0	0	90	5.90
SSW	11	49	1	0	0	0	61	5.18
SW	10	47	7	0	0	0	64	5.72
WSW	8	49	8	0	0	0	65	6.04
W	6	19	2	0	0	0	27	4.95
WNW	4	6	2	0	0	0	12	5.48
NW	4	8	1	0	0	0	13	5.20
NNW	3	2	3	0	0	0	8	6.67
Total	97	388	72	4	0	0	561	

Hours of Calm : 3  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 17  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	1	0	0	0	0	1	6.18
NE	0	0	1	1	0	0	2	12.55
ENE	2	0	0	0	0	0	2	2.95
E	0	3	0	0	0	0	3	5.46
ESE	4	0	0	1	0	0	5	5.82
SE	0	18	2	0	0	0	20	6.41
SSE	3	36	1	0	0	0	40	5.92
S	6	22	0	0	0	0	28	5.33
SSW	5	18	2	0	0	0	25	5.01
SW	9	17	1	0	0	0	27	4.73
WSW	4	12	0	0	0	0	16	4.24
W	6	4	0	0	0	0	10	3.46
WNW	8	4	0	0	0	0	12	3.80
NW	1	3	0	0	0	0	4	4.44
NNW	1	1	0	0	0	0	2	4.56
Total	49	139	7	2	0	0	197	

Hours of Calm : 1  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 3  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	1	0	0	0	1	8.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	1	0	0	0	0	0	1	2.39
ESE	0	0	0	0	0	0	0	0.00
SE	2	4	0	0	0	0	6	4.96
SSE	2	7	0	0	0	0	9	5.41
S	8	3	0	0	0	0	11	3.67
SSW	7	7	0	0	0	0	14	3.95
SW	6	3	1	0	0	0	10	4.25
WSW	10	2	0	0	0	0	12	2.95
W	7	3	0	0	0	0	10	3.79
WNW	8	2	0	0	0	0	10	3.29
NW	3	0	0	0	0	0	3	3.14
NNW	3	2	0	0	0	0	5	3.88
Total	57	33	2	0	0	0	92	

Hours of Calm : 2  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 8  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184



JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	17	31	17	17	2	0	84	8.51
NNE	21	49	35	28	7	0	140	9.26
NE	15	47	34	21	0	0	117	8.59
ENE	10	45	43	6	1	0	105	8.04
E	6	37	20	6	0	0	69	7.64
ESE	11	39	13	1	0	0	64	6.26
SE	9	65	17	0	0	0	91	6.08
SSE	17	154	48	4	0	0	223	6.78
S	31	142	53	8	3	0	237	6.99
SSW	28	122	30	4	0	1	185	6.17
SW	32	138	43	5	0	0	218	6.32
WSW	29	147	67	20	0	0	263	7.28
W	30	41	35	18	0	0	124	7.45
WNW	26	31	13	3	0	0	73	5.96
NW	13	21	6	2	0	0	42	5.96
NNW	18	11	15	6	0	0	50	7.31
Total	313	1120	489	149	13	1	2085	

Hours of Calm : 10  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data for All : 89  
 Hours of No Stability Class : 1  
 Total hours of observation : 2184

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: A  $\Delta T / \Delta z$

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	1	0	1	0	0	0	2	6.44
NNE	0	2	0	0	0	0	2	6.35
NE	0	0	0	0	0	0	0	0.00
ENE	0	1	0	0	0	0	1	7.80
E	0	1	0	0	0	0	1	6.60
ESE	0	0	0	0	0	0	0	0.00
SE	0	5	0	0	0	0	5	6.20
SSE	0	0	0	0	0	0	0	0.00
S	0	4	1	0	0	0	5	7.24
SSW	1	7	2	0	0	0	10	6.29
SW	1	6	0	0	0	0	7	5.91
WSW	0	0	1	0	0	0	1	8.68
W	0	0	0	0	0	0	0	0.00
WNW	0	0	1	0	0	0	1	9.30
NW	0	0	1	0	0	0	1	8.99
NNW	1	0	0	0	0	0	1	3.02
Total	4	26	7	0	0	0	37	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 1  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	1	0	0	0	1	6.16
NNE	1	0	0	1	1	0	3	14.45
NE	0	0	0	0	0	0	0	0.00
ENE	0	1	1	0	0	0	2	7.63
E	0	0	1	0	0	0	1	8.67
ESE	0	2	0	0	0	0	2	5.78
SE	2	0	0	0	0	0	2	3.68
SSE	0	1	0	0	0	0	1	4.39
S	0	4	0	0	0	0	4	6.13
SSW	1	2	2	0	0	0	5	7.01
SW	1	5	0	0	0	0	6	5.89
WSW	0	0	1	0	0	0	1	8.48
W	1	0	0	0	0	0	1	3.44
WNW	1	1	0	0	0	0	2	4.13
NW	0	0	0	0	0	0	0	0.00
NNW	1	0	0	0	0	0	1	3.17
Total	8	16	6	1	1	0	32	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27  
 Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00  
 Stability Class: C delta T/ delta z  
 Wind Sensor Height : 10 meter  
 Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	1	1	0	1	0	0	3	7.47
NNE	1	0	0	1	4	0	6	17.12
NE	0	2	3	0	0	0	5	8.67
ENE	0	5	0	0	0	0	5	6.54
E	2	7	0	0	0	0	9	4.85
ESE	1	0	0	0	0	0	1	3.92
SE	2	3	0	0	0	0	5	5.38
SSE	0	0	1	0	0	0	1	8.33
S	0	1	0	0	0	0	1	5.56
SSW	2	1	0	0	0	0	3	3.58
SW	1	1	0	0	0	0	2	4.03
WSW	1	4	0	0	0	0	5	5.09
W	1	0	0	0	0	0	1	3.86
WNW	2	0	0	0	0	0	2	2.58
NW	0	1	0	0	0	0	1	4.36
NNW	1	1	0	0	0	0	2	4.43
Total	15	27	4	2	4	0	52	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	4	15	10	7	1	0	37	8.36
NNE	8	13	15	33	4	1	74	11.92
NE	5	24	80	60	6	0	175	11.83
ENE	2	41	65	39	2	0	149	10.50
E	3	36	25	0	0	0	64	7.10
ESE	4	15	11	0	0	0	30	6.75
SE	9	18	2	0	0	0	29	5.25
SSE	6	19	6	0	0	0	31	5.87
S	10	20	17	0	0	0	47	6.89
SSW	10	31	28	0	0	0	69	7.12
SW	14	49	19	0	0	0	82	6.25
WSW	11	54	6	0	0	0	71	5.57
W	8	22	2	0	0	0	32	5.24
WNW	10	18	1	0	0	0	29	5.11
NW	4	14	1	0	0	0	19	5.45
NNW	5	12	7	2	0	0	26	6.84
<b>Total</b>	<b>113</b>	<b>401</b>	<b>295</b>	<b>141</b>	<b>13</b>	<b>1</b>	<b>964</b>	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 126  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	15	24	18	3	0	0	60	6.88
NNE	10	24	14	4	0	0	52	7.00
NE	8	10	4	1	0	0	23	5.94
ENE	3	7	4	0	0	0	14	6.67
E	6	8	14	0	0	0	28	7.10
ESE	8	20	1	0	0	0	29	5.18
SE	15	33	2	0	0	0	50	4.85
SSE	12	34	3	0	0	0	49	5.24
S	12	41	6	0	0	0	59	5.45
SSW	13	41	1	0	0	0	55	4.88
SW	26	33	0	0	0	0	59	4.15
WSW	14	41	4	0	0	0	59	4.92
W	14	20	1	0	0	0	35	4.97
WNW	13	6	0	0	0	0	19	4.00
NW	4	5	0	0	0	0	9	4.15
NNW	3	8	2	1	0	0	14	6.41
Total	176	355	74	9	0	0	614	

Hours of Calm : 1  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 99  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	2	0	0	0	0	2	5.70
NE	0	0	0	0	0	0	0	0.00
ENE	1	0	0	0	0	0	1	3.95
E	2	1	0	0	0	0	3	3.29
ESE	2	0	0	0	0	0	2	2.50
SE	2	11	0	0	0	0	13	4.67
SSE	8	11	0	0	0	0	19	4.61
S	12	13	0	0	0	0	25	4.18
SSW	6	15	0	0	0	0	21	4.44
SW	10	23	0	0	0	0	33	4.50
WSW	17	2	0	0	0	0	19	3.05
W	12	0	0	0	0	0	12	2.83
WNW	6	1	0	0	0	0	7	3.35
NW	4	3	0	0	0	0	7	3.91
NNW	0	2	0	0	0	0	2	4.80
Total	82	84	0	0	0	0	166	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 29  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	1	3	0	0	0	0	4	5.15
SSE	0	5	0	0	0	0	5	5.64
S	6	4	0	0	0	0	10	3.57
SSW	8	5	0	0	0	0	13	3.68
SW	13	1	0	0	0	0	14	3.04
WSW	21	0	0	0	0	0	21	2.84
W	7	1	0	0	0	0	8	2.86
WNW	7	0	0	0	0	0	7	2.66
NW	0	0	0	0	0	0	0	0.00
NNW	0	1	0	0	0	0	1	5.10
Total	63	20	0	0	0	0	83	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 1  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208



SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	21	40	30	11	1	0	103	7.43
NNE	20	41	29	39	9	1	139	10.19
NE	13	36	87	61	6	0	203	11.09
ENE	6	55	70	39	2	0	172	9.99
E	13	53	40	0	0	0	106	6.81
ESE	15	37	12	0	0	0	64	5.83
SE	31	73	4	0	0	0	108	5.01
SSE	26	70	10	0	0	0	106	5.35
S	40	87	24	0	0	0	151	5.64
SSW	41	103	33	0	0	0	177	5.73
SW	66	119	19	0	0	0	204	5.09
WSW	64	101	12	0	0	0	177	4.78
W	43	43	3	0	0	0	89	4.56
WNW	39	26	2	0	0	0	67	4.31
NW	12	23	2	0	0	0	37	4.91
NNW	11	25	9	3	0	0	48	6.31
<b>Total</b>	<b>461</b>	<b>932</b>	<b>386</b>	<b>153</b>	<b>18</b>	<b>1</b>	<b>1951</b>	

Hours of Calm : 1  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data for All : 256  
 Hours of No Stability Class : 3  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	1	0	0	1	15.61
NE	1	0	1	0	0	0	2	6.63
ENE	0	5	0	0	0	0	5	6.88
E	0	2	0	0	0	0	2	6.70
ESE	0	0	0	0	0	0	0	0.00
SE	0	1	0	0	0	0	1	6.48
SSE	0	1	0	0	0	0	1	7.24
S	0	2	0	0	0	0	2	5.06
SSW	0	1	0	0	0	0	1	6.86
SW	1	2	0	0	0	0	3	4.39
WSW	0	2	1	0	0	0	3	6.54
W	0	4	0	0	0	0	4	6.51
WNW	0	4	2	0	0	0	6	7.32
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	2	24	4	1	0	0	31	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	1	0	0	0	1	11.78
NNE	0	2	0	1	0	0	3	10.67
NE	0	3	1	0	0	0	4	7.24
ENE	0	1	0	0	0	0	1	7.58
E	0	1	0	0	0	0	1	7.78
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	3	0	0	0	0	3	6.26
S	0	0	2	0	0	0	2	8.13
SSW	0	0	0	0	0	0	0	0.00
SW	1	0	0	0	0	0	1	3.01
WSW	2	2	1	0	0	0	5	5.74
W	1	5	0	0	0	0	6	4.44
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	1	0	0	1	17.55
Total	4	17	5	2	0	0	28	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: C delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	1	2	0	0	3	12.88
NNE	0	1	2	9	0	0	12	14.54
NE	0	0	4	2	0	0	6	11.93
ENE	0	0	0	0	0	0	0	0.00
E	0	1	1	0	0	0	2	7.03
ESE	0	0	0	0	0	0	0	0.00
SE	0	1	0	0	0	0	1	4.60
SSE	0	2	0	0	0	0	2	5.69
S	0	0	1	0	0	0	1	8.28
SSW	0	1	0	0	0	0	1	5.17
SW	0	0	0	0	0	0	0	0.00
WSW	0	6	3	0	0	0	9	6.85
W	0	1	0	0	0	0	1	5.38
WNW	0	0	0	0	0	0	0	0.00
NW	1	0	0	1	0	0	2	8.87
NNW	0	1	0	1	0	0	2	10.46
Total	1	14	12	15	0	0	42	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 1  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	3	8	10	3	0	0	24	8.25
NNE	2	15	23	14	0	0	54	10.34
NE	3	22	49	58	1	0	133	11.78
ENE	3	23	59	21	0	0	106	10.58
E	3	15	9	0	0	0	27	6.85
ESE	7	10	4	0	0	0	21	5.48
SE	5	13	6	3	0	0	27	6.87
SSE	6	18	16	4	0	0	44	7.83
S	2	12	9	1	0	0	24	8.39
SSW	9	17	22	3	0	0	51	7.91
SW	9	28	30	0	0	0	67	7.68
WSW	3	29	26	4	0	0	62	8.03
W	6	13	7	4	3	0	33	8.37
WNW	6	12	3	1	0	0	22	6.04
NW	0	9	16	2	0	0	27	9.61
NNW	4	12	4	2	0	0	22	7.39
Total	71	256	293	120	4	0	744	

Hours of Calm : 2  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 8  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	18	51	9	0	0	0	78	5.55
NNE	18	21	13	2	0	0	54	6.19
NE	16	14	17	4	0	0	51	7.21
ENE	7	9	10	0	0	0	26	6.47
E	5	12	0	0	0	0	17	4.79
ESE	1	20	4	0	0	0	25	6.43
SE	12	10	5	1	0	0	28	5.61
SSE	10	19	7	0	0	0	36	5.36
S	9	16	5	1	0	0	31	5.58
SSW	9	38	9	3	0	0	59	6.37
SW	12	34	4	0	0	0	50	5.37
WSW	8	20	5	1	0	0	34	5.83
W	9	11	3	1	0	0	24	5.56
WNW	12	32	1	0	0	0	45	5.15
NW	6	9	1	0	0	0	16	5.29
NNW	22	16	5	0	0	0	43	4.88
Total	174	332	98	13	0	0	617	

Hours of Calm : 7  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 5  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 98  
 Total hours of observation : 2208

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	7	2	0	0	0	0	9	3.26
NNE	3	9	0	0	0	0	12	4.70
NE	4	2	0	0	0	0	6	3.01
ENE	4	1	0	0	0	0	5	2.61
E	2	4	0	0	0	0	6	4.54
ESE	5	7	1	0	0	0	13	5.04
SE	9	16	0	0	0	0	25	4.86
SSE	15	10	0	0	0	0	25	4.05
S	10	19	1	0	0	0	30	4.86
SSW	16	35	2	0	0	0	53	4.61
SW	10	8	0	0	0	0	18	3.84
WSW	6	4	0	0	0	0	10	3.32
W	6	3	0	0	0	0	9	3.60
WNW	3	19	0	0	0	0	22	4.96
NW	5	5	0	0	0	0	10	4.01
NNW	6	5	2	0	0	0	13	5.38
Total	111	149	6	0	0	0	266	

Hours of Calm : 5  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 8

SITE: U. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	2	0	0	0	0	0	2	2.21
NNE	8	0	0	0	0	0	8	2.02
NE	0	0	0	0	0	0	0	0.00
ENE	3	0	0	0	0	0	3	2.72
E	3	1	0	0	0	0	4	3.35
ESE	2	0	0	0	0	0	2	2.52
SE	11	4	1	0	0	0	16	3.80
SSE	16	20	0	0	0	0	36	4.31
S	22	18	0	0	0	0	40	3.67
SSW	26	8	0	0	0	0	34	3.40
SW	32	2	0	0	0	0	34	2.73
WSW	53	3	0	0	0	0	56	2.96
W	40	14	0	0	0	0	54	3.50
WNW	20	8	0	0	0	0	28	3.37
NW	6	4	0	0	0	0	10	3.41
NNW	1	0	0	0	0	0	1	2.04
Total	245	82	1	0	0	0	328	

Hours of Calm : 36  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208



## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 8

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	30	62	21	5	0	0	118	6.10
NNE	31	49	39	27	0	0	146	8.24
NE	24	42	72	77	2	0	217	10.67
ENE	18	39	70	22	1	0	150	9.38
E	13	36	10	0	0	0	59	5.80
ESE	15	37	9	0	0	0	61	5.68
SE	40	49	13	4	0	0	106	5.44
SSE	48	77	24	4	0	0	153	5.65
S	46	71	20	2	0	0	139	5.42
SSW	65	100	37	12	0	0	214	6.04
SW	69	75	39	0	0	0	183	5.64
WSW	75	68	38	5	0	0	186	5.62
W	63	51	10	5	3	0	132	5.24
WNW	42	76	6	1	0	0	125	4.96
NW	18	27	17	3	0	0	65	6.71
NNW	34	38	13	4	0	0	89	5.91
Total	631	897	438	171	6	0	2143	

Hours of Calm : 50  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data for All : 15  
 Hours of No Stability Class : 88  
 Total hours of observation : 2208

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: C delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 67

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	1	0	0	0	0	1	4.88
NE	0	2	0	0	0	0	2	7.14
ENE	0	1	0	0	0	0	1	4.80
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	1	0	0	0	0	1	5.48
SSE	0	0	7	0	0	0	7	10.91
S	0	1	3	1	0	0	5	10.59
SSW	0	3	0	0	0	0	3	6.99
SW	1	1	1	0	0	0	3	6.88
WSW	1	1	0	0	0	0	2	4.51
W	0	1	2	1	0	0	4	10.31
WNW	2	0	1	0	0	0	3	5.69
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	4	12	14	2	0	0	32	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	3	0	0	0	0	3	5.76
NNE	0	1	0	0	0	0	1	7.46
NE	0	2	0	0	0	0	2	6.51
ENE	1	4	0	0	0	0	5	5.71
E	0	5	0	0	0	0	5	5.89
ESE	0	0	0	0	0	0	0	0.00
SE	0	1	0	0	0	0	1	7.26
SSE	0	2	1	0	0	0	3	7.48
S	0	1	0	0	0	0	1	5.18
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	2	0	0	0	2	9.18
W	0	3	2	0	0	0	5	7.20
WNW	0	2	1	0	0	0	3	6.87
NW	1	0	0	0	0	0	1	3.53
NNW	0	0	0	0	0	0	0	0.00
Total	2	24	6	0	0	0	32	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	2	0	0	0	0	2	6.68
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	2	0	0	0	0	2	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	1	0	0	0	0	1	6.75
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	1	0	0	0	0	1	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67



## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 1- 1 00:00 to 1984- 3-31 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	3	0	0	0	0	3	5.76
NNE	0	2	0	0	0	0	2	6.17
NE	0	4	0	0	0	0	4	6.82
ENE	1	6	0	0	0	0	7	5.73
E	0	7	0	0	0	0	7	6.11
ESE	0	0	0	0	0	0	0	0.00
SE	0	2	0	0	0	0	2	6.37
SSE	0	2	8	0	0	0	10	9.88
S	0	2	3	1	0	0	6	9.69
SSW	0	3	0	0	0	0	3	6.99
SW	1	1	1	0	0	0	3	6.88
WSW	1	1	2	0	0	0	4	6.84
W	0	4	4	1	0	0	9	8.58
WNW	2	2	2	0	0	0	6	6.28
NW	1	0	0	0	0	0	1	3.53
NNW	0	0	0	0	0	0	0	0.00
Total	6	39	20	2	0	0	67	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 67

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 33

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 33

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: C delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 33

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	1	0	2	0	0	0	3	7.35
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	1	1	1	0	0	3	10.69
S	0	0	2	0	0	0	2	10.30
SSW	0	1	1	0	0	0	2	7.78
SW	0	1	0	0	0	0	1	7.59
WSW	0	4	0	0	0	0	4	5.88
W	0	2	0	0	0	0	2	6.69
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	1	9	6	1	0	0	17	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 33

JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	1	0	0	0	1	11.90
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	1	1	0	0	0	0	2	4.90
SE	1	3	0	0	0	0	4	4.64
SSE	0	1	0	0	0	0	1	7.00
S	0	1	3	0	0	0	4	8.70
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	1	0	0	0	0	1	4.87
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	2	7	4	0	0	0	13	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 33

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	3	0	0	0	0	3	5.60
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	3	0	0	0	0	3	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 33

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 33



SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 4- 1 00:00 to 1984- 6-30 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	1	0	3	0	0	0	4	8.49
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	1	1	0	0	0	0	2	4.90
SE	1	6	0	0	0	0	7	5.06
SSE	0	2	1	1	0	0	4	9.77
S	0	1	5	0	0	0	6	9.24
SSW	0	1	1	0	0	0	2	7.78
SW	0	1	0	0	0	0	1	7.59
WSW	0	5	0	0	0	0	5	5.67
W	0	2	0	0	0	0	2	6.69
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	3	19	10	1	0	0	33	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 33

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 43

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 43

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: C delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 43

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	1	0	0	0	0	0	1	2.33
SSE	0	0	2	0	0	0	2	10.60
S	0	0	2	0	0	0	2	10.70
SSW	0	3	5	0	0	0	8	8.19
SW	0	6	4	0	0	0	10	7.35
WSW	0	1	0	0	0	0	1	7.98
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	1	10	13	0	0	0	24	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 43

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	1	0	0	0	0	1	7.65
S	1	3	1	0	0	0	5	5.95
SSW	0	9	0	0	0	0	9	5.33
SW	0	1	0	0	0	0	1	5.65
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	1	14	1	0	0	0	16	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 43

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: F  $\Delta T / \Delta z$ Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	1	0	0	0	0	0	1	2.31
SSW	0	0	0	0	0	0	0	0.00
SW	2	0	0	0	0	0	2	2.97
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	3	0	0	0	0	0	3	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 0  
Hours of No Stability Class : 0  
Total hours of observation : 43

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 43



SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984- 7- 1 00:00 to 1984- 9-30 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	1	0	0	0	0	0	1	2.33
SSE	0	1	2	0	0	0	3	9.62
S	2	3	3	0	0	0	8	6.69
SSW	0	12	5	0	0	0	17	6.67
SW	2	7	4	0	0	0	13	6.54
WSW	0	1	0	0	0	0	1	7.98
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	5	24	14	0	0	0	43	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data for All : 0  
 Hours of No Stability Class : 0  
 Total hours of observation : 43

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: A delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 1  
Hours of No Stability Class : 0  
Total hours of observation : 184

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: B delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	1	0	0	0	0	1	5.78
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	1	0	0	0	0	1	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 1  
Hours of No Stability Class : 0  
Total hours of observation : 184

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: C delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	0	0	0	0	0	0	0.00
SSE	0	0	0	0	0	0	0	0.00
S	0	0	0	0	0	0	0	0.00
SSW	0	0	0	0	0	0	0	0.00
SW	0	0	0	0	0	0	0	0.00
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	0	0	0	0	0	0	0.00
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	0	0	0	0	0	0	0	

Hours of Calm : 0  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 1  
Hours of No Stability Class : 0  
Total hours of observation : 184

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: D delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	1	0	0	0	1	8.24
NNE	0	1	5	1	0	0	7	11.46
NE	0	1	9	4	0	0	14	11.78
ENE	0	2	3	4	0	0	9	11.47
E	0	0	0	0	0	0	0	0.00
ESE	1	1	0	0	0	0	2	4.05
SE	0	3	0	0	0	0	3	4.56
SSE	0	2	0	0	0	0	2	5.71
S	0	0	0	0	0	0	0	0.00
SSW	0	2	3	0	0	0	5	8.33
SW	0	3	4	0	0	0	7	8.11
WSW	1	4	0	0	0	0	5	4.62
W	1	4	0	0	0	0	5	4.62
WNW	1	2	0	0	0	0	3	5.37
NW	0	0	3	0	0	0	3	9.22
NNW	1	4	0	0	0	0	5	6.00
Total	5	29	28	9	0	0	71	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 1  
 Hours of No Stability Class : 0  
 Total hours of observation : 184

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: E delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	2	8	0	0	0	0	10	5.09
NNE	0	1	3	0	0	0	4	9.94
NE	0	1	3	0	0	0	4	9.03
ENE	0	1	6	0	0	0	7	9.43
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	0	2	0	0	0	0	2	4.83
SSE	1	0	0	0	0	0	1	3.63
S	1	0	0	0	0	0	1	2.22
SSW	0	2	0	0	0	0	2	4.44
SW	2	0	0	0	0	0	2	3.64
WSW	1	2	0	0	0	0	3	4.49
W	2	1	0	0	0	0	3	3.88
WNW	0	2	0	0	0	0	2	5.45
NW	0	0	0	0	0	0	0	0.00
NNW	2	1	0	0	0	0	3	3.66
Total	11	21	12	0	0	0	44	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 1  
 Hours of Missing Data for All : 1  
 Hours of No Stability Class : 0  
 Total hours of observation : 184

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: F delta T/ delta z

Wind Sensor Height : 10 meter

+++ Batch Release Times Only +++

Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	1	0	0	0	0	1	5.81
SE	1	0	0	0	0	0	1	2.71
SSE	0	0	0	0	0	0	0	0.00
S	0	2	0	0	0	0	2	5.21
SSW	3	11	0	0	0	0	14	4.68
SW	3	1	0	0	0	0	4	3.45
WSW	0	0	0	0	0	0	0	0.00
W	0	0	0	0	0	0	0	0.00
WNW	0	1	0	0	0	0	1	4.65
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	7	16	0	0	0	0	23	

Hours of Calm : 0  
 Hours of Varying Wind Direction : 0  
 Hours of Missing Data : 0  
 Hours of Missing Data for All : 1  
 Hours of No Stability Class : 0  
 Total hours of observation : 184

## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class: G delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	0	0	0	0	0	0	0	0.00
NNE	0	0	0	0	0	0	0	0.00
NE	0	0	0	0	0	0	0	0.00
ENE	0	0	0	0	0	0	0	0.00
E	0	0	0	0	0	0	0	0.00
ESE	0	0	0	0	0	0	0	0.00
SE	5	1	1	0	0	0	7	4.24
SSE	5	1	0	0	0	0	6	3.47
S	5	1	0	0	0	0	6	3.27
SSW	8	3	0	0	0	0	11	3.62
SW	5	1	0	0	0	0	6	3.15
WSW	2	0	0	0	0	0	2	3.54
W	4	0	0	0	0	0	4	3.49
WNW	1	0	0	0	0	0	1	3.37
NW	0	0	0	0	0	0	0	0.00
NNW	0	0	0	0	0	0	0	0.00
Total	35	7	1	0	0	0	43	

Hours of Calm : 1  
Hours of Varying Wind Direction : 0  
Hours of Missing Data : 0  
Hours of Missing Data for All : 1  
Hours of No Stability Class : 0  
Total hours of observation : 184



## JOINT WIND FREQUENCY DISTRIBUTION BY STABILITY CLASS

Table 9

SITE: V. C. SUMMER Nuclear Station UNIT 1

Report Date : 1985- 2-27

Data Period : 1984-10- 1 00:00 to 1984-12-31 23:00

Stability Class:ALL delta T/ delta z

Wind Sensor Height : 10 meter +++ Batch Release Times Only +++  
Hours at Each Wind Direction and Speed

Wind Direction	Wind Speed (miles/hour)						Total	Mean Speed
	0.75- <4	4- <8	8- <13	13- <19	19- 24	>24		
N	2	8	1	0	0	0	11	5.38
NNE	0	2	8	1	0	0	11	10.90
NE	0	2	12	4	0	0	18	11.17
ENE	0	3	9	4	0	0	16	10.58
E	0	0	0	0	0	0	0	0.00
ESE	1	2	0	0	0	0	3	4.63
SE	6	6	1	0	0	0	13	4.29
SSE	6	4	0	0	0	0	10	4.16
S	6	3	0	0	0	0	9	3.59
SSW	11	18	3	0	0	0	32	4.87
SW	10	5	4	0	0	0	19	5.09
WSW	4	6	0	0	0	0	10	4.36
W	7	5	0	0	0	0	12	4.06
WNW	2	5	0	0	0	0	7	5.01
NW	0	0	3	0	0	0	3	9.22
NNW	3	5	0	0	0	0	8	5.12
Total	58	74	41	9	0	0	182	

Hours of Calm : 1  
Hours of Varying Wind Direction : 0  
Hours of Missing Data for All : 1  
Hours of No Stability Class : 0  
Total hours of observation : 184