RIVER BEND STATION - UNIT 1
SEMI-ANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT

REPORT PERIOD: JULY 1, 1991 THROUGH DECEMBER 31, 1991

REVIEWED BY: _____
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TABLE OF CONTENTS

PAGE

XVI. TABLES

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

FACILITY: River Bend Station, Unit 1

LICENSEE: Gulf States Utilities

REPORT PERIOD: July 1, 1991 Through December 31, 1991

I. INTRODUCTION

Enclosed is the Semiannual Radioactive Effluent Release Report for the period of July 1, 1991 through December 31, 1991. This report is submitted in accordance with Technical Specification 6.9.1.8 of Appendix A to River Bend Station (RBS) License Number NPF-47.

Gaseous release totals were a maximum of 5.74% of the quarterly technical specification limits. Liquid releases were a maximum of 3.45% of their quarterly technical specification limits.

II. SUPPLEMENTAL INFORMATION

A. Regulatory Limits

1. 10CFR20 Limits

a. Fission and Activation Gases

In accordance with Technical Specification 3.11.2.1, the dose rate due to noble gases released in gaseous effluents from the site to areas at and beyond the **SITE BOUNDARY** shall be limited to less than or equal to 500 millirems/year (mrems/yr) to the total body and less than or equal to 3000 mrems/yr to the skin:

DR_{TB} = Dose rate to the total body in mrems/yr

$$= 3.15E+07 \sum_{i=1}^{n} K_i \ (\overline{X/Q}) \ \dot{Q}_i \leq 500 \text{ mrems/yr}$$

and

DR_{SKIN} = Dose rate to the skin in mrems/yr

$$= 3.15E+07 \sum_{i=1}^{n} (L_i + 1.1M_i) \ (\overline{X/Q}) \ \dot{Q}_i \leq 3000 \text{ mrems/yr}$$

(above terms defined in RBS ODCM)

b. Radioiodines and Particulates

In accordance with Technical Specification 3.11.2.1, the dose rate due to iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days released in gaseous effluents from the site to areas at and beyond the **SITE BOUNDARY** shall be limited to less than or equal to 1500 mrems/yr to any organ:

$DR_{[AEDP]_T}$ = Dose rate to the organ T for the age group of interest from iodines, tritium, and 8 day particulates via the inhalation pathway in mrems/yr

$$= \sum_{i=1}^{n} P_i \ (\overline{X/Q})_D \ \dot{Q}_i \leq 1500 \text{ mrems/yr}$$

(above terms defined in RBS ODCM)

c. Liquid Effluents

In accordance with Technical Specification 3.11.1.1, the concentration of radioactive material released in liquid effluents to **UNRESTRICTED AREAS** shall be limited to the concentrations specified in 10CFR20, Appendix B, Table II, Column 2 for radionuclides other than dissolved and entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2.0E-04 microcuries/ml total activity.

2. 10CFR50, Appendix I Limits

a. Fission and Activation Gases

In accordance with Technical Specification 3.11.2.2, the air dose due to noble gases released in gaseous effluents to areas at or beyond the **SITE BOUNDARY** shall be limited to:

$D_{Gamma\text{-}Air}$ = The gamma air dose from radioactive noble gases in millrad (mrad)

$$= \sum_{i=1}^{n} M_i \left(\overline{X/Q}\right) Q_i \quad \leq 5 \text{ mrads/qtr} \quad \leq 10 \text{ mrads/yr}$$

$D_{Beta\text{-}Air}$ = Beta air dose from radioactive noble gases in mrad

$$= \sum_{i=1}^{n} N_i \left(\overline{X/Q}\right) Q_i \quad \leq 10 \text{ mrads/qtr} \quad \leq 20 \text{ mrads/yr}$$

(above terms defined in RBS ODCM)

b. Radioiodines and Particulates

In accordance with Technical Specification 3.11.2.3, the dose to a **MEMBER OF THE PUBLIC** from iodine-131, iodine-133, tritium and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents releases to areas at and beyond the **SITE BOUNDARY** shall be limited to:

$D_{I\&DP\tau}$ = Dose in mrem to the organ (τ) of a specified age group from radioiodines, tritium, and 8 day particulates via the pathway of interest

$$= 3.17E\text{-}08 \sum_{i=1}^{n} R_{i\tau} \overline{(X/Q)}_D Q_i$$

and/or

$$= 3.17E\text{-}08 \sum_{i=1}^{n} R_{i\tau} \overline{(D/Q)} Q_i$$

and

D_τ = Dose in mrem to the organ (τ) of a specified age group from radioiodines, tritium, and 8 day particulates from all pathways

$$= \sum_{z=1}^{n} D_{IASDP\tau} \leq 7.5 \text{ mrem/qtr}$$
$$\leq 15 \text{ mrem/yr}$$

(above terms defined RBS ODCM)

c. Liquid Effluents

In accordance with Technical Specification 3.11.1.2, the dose or dose commitment to a **MEMBER OF THE PUBLIC** from radioactive materials in liquid effluents released to **UNRESTRICTED AREAS** shall be limited to:

$$D_{i\tau} = \frac{A_{i\tau} \Delta t \, Q_i}{(DF) \, D_{i\tau}}$$

$$D_{TOTAL\tau} = \sum_{i=1}^{n} D_{i\tau}$$

$D_{TOTAL\tau}$ = Total dose commitment to the organ (τ) due to all releases during the desired time interval in mrem

and D_{TOTAL} Total Body ≤ 1.5 mrem/qtr

≤ 3 mrem/yr

D_{TOTAL} Any Organ ≤ 5 mrem/qtr

≤ 10 mrem/yr

(above terms defined in RBS ODCM)

3. 40CFR190 Limits

In accordance with Technical Specification 3.11.4, the annual (calendar year) dose or dose commitment to any **MEMBER OF THE PUBLIC**, due to releases of radioactivity and to radiation from uranium fuel cycle sources, shall be limited to:

≤ 25 mrems to the total body or any organ (except the thyroid)

≤ 75 mrems to the thyroid

4. Miscellaneous Limits

a. Ventilation Exhaust Treatment System
In accordance with Technical Specification 3.11.2.5, the **VENTILATION EXHAUST TREATMENT SYSTEM** shall be used to reduce radioactive materials in gaseous waste prior to their discharge when the projected doses, due to gaseous effluent releases to areas at and beyond the **SITE BOUNDARY** would exceed 0.3 mrem to any organ in a 31 day period.

b. Liquid Radwaste Treatment System
In accordance with Technical Specification 3.11.1.3, the liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid wastes prior to their discharge when the projected doses, due to the liquid effluent, to **UNRESTRICTED AREAS** would exceed 0.06 mrem to the total body or 0.2 mrem to any organ in a 31 day period.

B. Maximum Permissible Concentrations

1. Gaseous Releases

The RBS Radiological Effluents Technical Specifications (RETS) for gaseous releases are based on the dose rate restrictions of 10CFR20, rather than the Maximum Permissible Concentrations (MPC) listed in 10CFR20 Appendix B, Table II, Column I.

2. Liquid Releases

The Maximum Permissible Concentration of radioactive materials in liquid effluents is limited by 10CFR20, Appendix B, Table II, Column 2. The MPC chosen is the most conservative value (i.e., the lowest) of either the soluble or insoluble MPC for each radionuclide.

C. Average Energy

Period	E-Bar (MeV/dis)
01/01/91 - 07/01/92	1.60
07/02/92 - 12/31/92	1.48

D. Measurements and Approximations of Total Radioactivity

1. Gaseous Effluents

a. Fission and Activation Gases

Periodic grab samples are obtained from the Main Plant Exhaust Duct, Fuel Building Exhaust Vent and Radwaste Building Exhaust Vent. These samples are analyzed utilizing high purity germanium detectors coupled to computerized pulse height analyzers. The sampling and analysis frequencies are described in Table 1. Sampling and analysis of these effluent streams provide noble gas radionuclide relative abundances which can then be applied to the noble gas gross activity and gross activity release rate to obtain nuclide specific activities and release rates. The noble gas gross activity released within a specific time period is determined by integrating the stack monitor release rate over the considered time period. If no activity was detected between stack grab samples and significant increase in hourly averages were recorded, the nuclide relative abundances of the last sample which indicated the presence of activity was utilized to obtain nuclide specific activities. Correction factors for the monitors are derived and applied for each sampling period whenever noble gas radionuclides are detected in the effluent stream.

b. Particulates and Iodines

Particulates and iodines are continuously sampled from each of the three release points utilizing a particulate filter and charcoal cartridge in line with a ample pump (stack monitor pump). These filters and charcoal cartridges are removed and analyzed in accordance with the frequencies specified in Table 1. Analysis is performed to identify and quantify radionuclides utilizing high purity germanium detectors coupled to computerized pulse height analyzers. Given the nuclide specific activity concentrations, process flow rate, and time which the sample covered; the nuclide specific activity released to the environment can be obtained. Due to the continuous sampling process, it is assumed that the radioactive material is released to the environment at a constant rate within the sampling period. Sr-89 and Sr-90 are quantitatively analyzed by counting the digested filter precipitate with a gas flow proportional counter. Gross alpha analysis is performed using a zinc sulfide scintillation counter.

c. Tritium

Tritium grab samples are obtained from the three release points at the specified frequencies listed in Table 1 utilizing an ice bath condensation collection method. The collected sample is then analyzed utilizing a Liquid Scintillation Counter. Given the tritium concentration, process flow rate, and time period for which the sample is obtained, the tritium activity released to the environment can be determined. Due to the frequency of sampling, it is assumed that the tritium is released to the environment at a constant rate within the time period for which the sample is obtained.

2. Liquid Effluents

Representative grab samples are obtained from the appropriate sample recovery tank and analyzed prior to release of the tank in accordance with the frequencies listed in Table 2. Analysis for gamma emitting nuclides (including dissolved and entrained noble gases) is performed utilizing a high resolution germanium detector coupled to a computerized pulse height analyzer. Tritium concentration is determined utilizing a Liquid Scintillation Counter. Sr-89 and Sr-90 are quantitatively analyzed by counting the precipitate with a gas flow proportional counter. Fe-55 is counted with a Liquid Scintillation Counter after digestion of the iron. Gross alpha analysis is performed using a zinc sulfide scintillation counter.

Given the nuclide specific activity concentration and total volume of the tank that was released, the activity of each nuclide released to the environment can be determined.

E. Batch Releases

1. Liquid

3rd Quarter 1991

a.	Number of batch releases	: 77
b.	Total time period for batch releases	: 534.38 hr
c.	Maximum time period for batch releases	: 17.08 hr
d.	Average time period for batch releases	: 6.94 hr
e.	Minimum time period for a batch release	: 0.05 hr
f.	Average stream flow during periods of release of effluent into a flowing stream	: 275,667 ft^3/sec

4th Quarter 1991

a.	Number of batch releases	: 70
b.	Total time period for batch releases	: 457.47 hr
c.	Maximum time period for batch releases	: 8.10 hr
d.	Average time period for batch releases	: 6.54 hr
e.	Minimum time period for a batch release	: 0.07 hr
f.	Average stream flow during periods of release of effluent into a flowing stream	: 424,667 ft^3/sec

2. Gaseous

All gaseous releases from River Bend Station are considered continuous releases.

F. Abnormal Releases

No abnormal Liquid or Gaseous release occurred during the reporting period of July 1, 1991 through December 31, 1991.

G. Estimate of Total Error

1. Liquid

The maximum error associated with sample collection, laboratory analysis, and discharge volume are collectively estimated to be:

Fission and Activation Products	:	± 14.2%
Tritium	:	± 14.2%
Dissolved and Entrained Noble Gases	:	± 14.2%
Gross Alpha Radioactivity	:	± 14.2%

2. Gaseous

The maximum errors (not including sample line loss) associated with sample flow, process flow, sample collection, monitor accuracy and laboratory analysis are collectively estimated to be:

Fission and Activation Gases	:	± 37.0%
Iodines	:	± 18.6%
Particulates	:	± 18.6%
Tritium	:	± 18.2%

3. Determination of Total Error

The total error (i.e., collective error due to sample collection, laboratory analysis, sample flow, process flow, monitor accuracy, etc.) is calculated using the following equation:

$$E = \sqrt{(E_1)^2 + (E_2)^2 + \ldots (E_n)^2}$$

Where

E = total error

$E_1, E_2 \ldots E_n$ = individual errors due to sample collection, laboratory analysis, sample flow, process flow, monitor accuracy, etc.

III. GASEOUS EFFLUENTS SUMMARY INFORMATION

Refer to Tables 3, 4 and 5 for Summation of All Releases and Nuclides Released, respectively. It should be noted that an entry of "0.00E+00" Curie (Ci) or microcurie/second (uCi/sec) in this section does not indicate the absence of a radionuclide; but, rather, indicates that the concentration of the particular radionuclide was below the Lower Limit of Detection (LLD) as listed in Table 1.

IV. LIQUID EFFLUENTS SUMMARY INFORMATION

Refer to Table 6 for Summation of All Releases and Nuclides Released. It should be noted that an entry of "0.00E+00" Ci or uCi/ml in this section does not indicate the absence of a radionuclide; but, rather, indicates that the concentration of the particular radionuclide was below the Lower Limit of Detection (LLD) as listed in Table 2.

V. SOLID WASTE

Refer to Table 7.

VI. RADIOLOGICAL IMPACT ON MAN

Doses to the maximally exposed individual offsite and populations were calculated using measured effluent and meteorological data. These doses can be found in Tables 8 through 12. Fourth quarter gaseous Sr-89 and Sr-90 values we based on third quarter composite results. Since the third quarter composite results for liquids were less than LLD, fourth quarter liquid Sr-89, Sr-90, and Fe-55 values were based on second quarter composite results. Fourth quarter and 40CFR190 values will be provided in the Addendum to the Semi-Annual Radiological Effluents Release Report.

In addition, doses were calculated for a maximally exposed member of the public inside the site boundary. Parameters and assumptions utilized to make this determination can be found in Table 13. The results of the calculations can be found in Table 14. The maximally exposed member of the public on site was the private driver who delivers an employee to work and returns later that day to pick him/her up. It should be noted that liquid effluent pathway dose was not considered since these individuals would not engage in activities that would allow exposure to this pathway.

VII. METEOROLOGICAL DATA

See Tables 15 and 16 for cumulative joint frequency distributions and meteorological data for continuous releases.

VIII. RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION OPERABILITY

The minimum number of channels required to be **OPERABLE** as described in Table 3.3.7.10-1 of Technical Specification 3.3.7.10 were, if inoperable at any time in the period 7/1/91 through 12/31/91, restored to operable status within the required time. Reporting of these inoperable channels in this report is, therefore, not required.

IX. RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION OPERABILITY

The minimum number of channels required to be **OPERABLE** as described in Table 3.3.7.11-1 of Technical Specification 3.3.7.11 were, if inoperable at any time in the period 7/1/91 through 12/31/91, restored to operable status within the required time. Reporting of these inoperable channels in this report is therefore, not required.

X. LIQUID HOLD UP TANKS

The maximum quantity of radioactive material, excluding tritium and dissolved or entrained noble gases, contained in any unprotected outdoor tank during the period of 7/1/91 through 12/31/91 was less than or equal to the 10 curie limit as required by Technical Specification 3.11.1.4.

XI. RADIOLOGICAL ENVIRONMENTAL MONITORING

There were no changes in sampling locations for the Radiological Environmental Monitoring Program (REMP) during the reporting period 7/1/91 through 12/31/91.

XII. LAND USE CENSUS

The Land Use Census, as required by Technical Specification 4.12.2, did not identify any location(s) that would yield a calculated dose or dose commitment greater than the values calculated.

XIII. OFFSITE DOSE CALCULATION MANUAL (ODCM)

There were no changes to the ODCM for the period of 7/1/91 through 12/31/91.

XIV. MAJOR CHANGES TO RADIOACTIVE LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS

There were no major changes to the radioactive liquid, gaseous, and solid waste treatment systems for the period of 7/1/91 through 12/31/91.

XV. PROCESS CONTROL PROGRAM (PCP)

No changes were made to the RBS Process Control Program (PCP) for the period 7/1/91 through 12/31/91.

TABLE 1
RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM

GASEOUS RELEASE TYPE	SAMPLING FREQUENCY	MINIMUM ANALYSIS FREQUENCY	TYPE OF ACTIVITY ANALYSIS	LOWER LIMIT OF DETECTION (LLD) uCi/ml
A. Main Plant Exhaust Duct	M Grab Sample	M	Principal Gamma Emitters	1.00E-04
			H-3	1.00E-06
B. Fuel Building Ventilation Exhaust Duct	M Grab Sample	M	Principal Gamma Emitters	1.00E-04
			H-3	1.00E-06
C. Radwaste Building Ventilation Exhaust Duct	M Grab Sample	M	Principal Gamma Emitters	1.00E-04
D. All Release Types as listed in A, B, & C Above	Continuous	W Charcoal Sample	I-131	1.00E-12
			I-133	1.00E-10
	Continuous	W Particulate Sample	Principal Gamma Emitters (I-131, Others)	1.00E-11
	Continuous	M Composite Particulate Sample	Gross Alpha	1.00E-11
	Continuous	Q Composite Particulate Sample	Sr-89, Sr-90	1.00E-11
	Continuous	Noble Gas Monitor	Noble Gases Gross Beta or Gamma	1.00E-06

W = AT LEAST ONCE PER 7 DAYS
M = AT LEAST ONCE PER 31 DAYS
Q = AT LEAST ONCE PER 92 DAYS

TABLE 2
RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM

LIQUID RELEASE TYPE	SAMPLING FREQUENCY	MINIMUM ANALYSIS FREQUENCY	TYPE OF ACTIVITY ANALYSIS	LOWER LIMIT OF DETECTION (LLD) uCi/ml
A. Batch Waste Release (Liquid Radwaste Recovery Sample Tanks	P Each Batch	P Each Batch	Principal Gamma Emitters; except for Ce-144 I-131	5.00E-07 5.00E-06 1.00E-06
	P One Batch/M	M	Dissolved and Entrained Gases (Gamma Emitters)	1.00E-05
	P Each Batch	M Composite	H-3 Gross Alpha	1.00E-05 1.00E-07
	P Each Batch	Q Composite	Sr-89, Sr-90 Fe-55	5.00E-08 1.00E-06

P = Prior to each radioactive release
M = At least once per 31 days
Q = At least once per 92 days

TABLE 3
Effluent and Waste Disposal Semi-Annual Report 1991 Year
Gaseous Effluents - Summation of All Releases 3/4 Quarters

	Unit	Quarter 3	Quarter 4	Estimated Total Error %
A. Noble Gases				
1. Total Release	Ci	2.96E+02	4.81E+02	3.70E+01
2. Average release rate for period	uCi/sec	3.76E+01	6.10E+01	
3. Percent of technical specification limit (1)	%	5.74	4.68	
B. Iodines				
1. Total I-131 and I-133	I-131 Ci	9.33E-03	8.00E-03	1.86E+01
	I-133 Ci	6.99E-02	4.82E-02	1.86E+01
2. Average release rate for period uCi/sec	I-131	1.20E-03	1.00E-03	
	I-133	8.90E-03	6.10E-03	
3. I-131 + I-133 contribution percent of technical specification limit	%	4.30	3.57	
C. Particulates				
1. Particulates with half lives of > 8 days	Ci	1.88E-03	(2)	1.86E+01
2. Average release rate for period	uCi/sec	2.00E-04	(2)	
3. Percent of technical specification limit	%	0.0584	(2)	
4. Gross alpha radioactivity	Ci	0.00E+00	0.00E+00	

	Unit	Quarter 3	Quarter 4	Estimated Total Error %

D. Tritium

1. Total Release	Ci	3.94E+00	2.42E+00	1.82E+01
2. Average release rate for period	uCi/sec	5.00E-01	3.07E-01	
3. Percent of technical Specification limit	%	0.0203	0.0147	

(1) Either the gamma air dose limit of 5 mrads/qtr or beta air dose limit of 10 mrads/qtr (T.S. 3.11.2.2.a), which ever is most limiting.

(2) Date is not available for submission at this time, supplemental report will follow.

TABLE 4

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1991 YEAR
GASEOUS EFFLUENTS - CONDITIONALLY ELEVATED RELEASES 3/4 QUARTERS

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4
1. Fission Gases					
Argon-41	Ci	0.00E+00	0.00E+00	N/A	N/A
Krypton-85m	Ci	5.95E+00	1.84E+00	N/A	N/A
Krypton-85	Ci	0.00E+00	0.00E+00	N/A	N/A
Krypton-87	Ci	0.00E+00	1.18E+01	N/A	N/A
Krypton-88	Ci	0.00E+00	8.40E+00	N/A	N/A
Xenon-133m	Ci	0.00E+00	0.00E+00	N/A	N/A
Xenon-133	Ci	2.71E+01	1.44E+02	N/A	N/A
Xenon-135m	Ci	5.14E+01	1.04E+02	N/A	N/A
Xenon-135	Ci	7.12E+01	1.39E+02	N/A	N/A
Xenon-137	Ci	0.00E+00	0.00E+00	N/A	N/A
Xenon-138	Ci	0.00E+00	2.18E+01	N/A	N/A
Unidentified	Ci	N/A	N/A	N/A	N/A
Total For Period	Ci	1.55E+02	4.31E+02	N/A	N/A
2. Gaseous Iodines					
Iodine-131	Ci	9.04E-03	7.81E-03	N/A	N/A
Iodine-132	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-133	Ci	6.88E-02	4.74E-02	N/A	N/A
Iodine-134	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-135	Ci	0.00E+00	0.00E+00	N/A	N/A
Total	Ci	7.78E-02	5.52E-02	N/A	N/A

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4
3. Particulates					
Strontium-89	Ci	4.75E-04	(1)	N/A	N/A
Strontium-90	Ci	1.76E-07	(1)	N/A	N/A
Cesium-134	Ci	0.00E+00	0.00E+00	N/A	N/A
Cesium-137	Ci	0.00E+00	0.00E+00	N/A	N/A
Barium-140	Ci	1.37E-03	6.39E-04	N/A	N/A
Cobalt-60	Ci	0.00E+00	5.82E-05	N/A	N/A
Chromium-51	Ci	3.13E-05	9.39E-05	N/A	N/A
Zirconium-95	Ci	0.00E+00	0.00E+00	N/A	N/A
Niobium-95	Ci	0.00E+00	0.00E+00	N/A	N/A
Zinc-65	Ci	0.00E+00	0.00E+00	N/A	N/A
Iron-59	Ci	0.00E+00	0.00E+00	N/A	N/A
Manganese-54	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-131	Ci	0.00E+00	0.00E+00	N/A	N/A
Cerium-141	Ci	0.00E+00	4.18E-06	N/A	N/A
Cerium-144	Ci	0.00E+00	0.00E+00	N/A	N/A
Cobalt-58	Ci	0.00E+00	0.00E+00	N/A	N/A
Silver-110m	Ci	0.00E+00	0.00E+00	N/A	N/A
Molybdenum-99	Ci	0.00E+00	0.00E+00	N/A	N/A
Unidentified	Ci	N/A	N/A	N/A	N/A
Total For Period	Ci	1.88E-03	(1)	N/A	N/A

Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4

4. Tritium

Hydrogen-3	Ci	3.56E+00	2.04E+00	N/A	N/A

(1) Data is not available for submission at this time, supplemental report will follow.

NOTE: Main Plant Exhaust Duct is considered a conditionally elevated release point.

TABLE 5

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1991 YEAR
GASEOUS EFFLUENTS - GROUND LEVEL RELEASES 3/4 QUARTERS

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4
1.Fission Gases					
Argon-41	Ci	0.00E+00	0.00E+00	N/A	N/A
Krypton-85m	Ci	8.66E-02	0.00E+00	N/A	N/A
Krypton-85	Ci	0.00E+00	0.00E+00	N/A	N/A
Krypton-87	Ci	0.00E+00	0.00E+00	N/A	N/A
Krypton-88	Ci	0.00E+00	0.00E+00	N/A	N/A
Xenon-133m	Ci	7.83E-01	3.34E-02	N/A	N/A
Xenon-133	Ci	3.48E+01	1.07E+01	N/A	N/A
Xenon-135m	Ci	4.41E+00	6.96+00	N/A	N/A
Xenon-135	Ci	1.01E+02	3.25E+01	N/A	N/A
Xenon-137	Ci	0.00E+00	0.00E+00	N/A	N/A
Xenon-138	Ci	0.00E+00	0.00E+00	N/A	N/A
Unidentified	Ci	N/A	N/A	N/A	N/A
Total For Period	Ci	1.41+02	5.02E+01	N/A	N/A
2. Gaseous Iodines					
Iodine-131	Ci	2.89E-04	1.89E-04	N/A	N/A
Iodine-132	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-133	Ci	1.08E-03	7.99E-04	N/A	N/A
Iodine-134	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-135	Ci	0.00E+00	0.00E+00	N/A	N/A
Total	Ci	1.37E-03	9.88E-04	N/A	N/A

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4

3. Particulates

Strontium-89	Ci	3.11E-06	(1)	N/A	N/A
Strontium-90	Ci	0.00E+00	(1)	N/A	N/A
Cesium-134	Ci	0.00E+00	0.00E+00	N/A	N/A
Cesium-137	Ci	0.00E+00	0.00E+00	N/A	N/A
Barium	Ci	0.00E+00	0.00E+00	N/A	N/A
Lanthanum-140	Ci	0.00E+00	0.00E+00	N/A	N/A
Cobalt-60	Ci	0.00E+00	0.00E+00	N/A	N/A
Chromium-51	Ci	0.00E+00	0.00E+00	N/A	N/A
Zirconium-niobium-95	Ci	0.00E+00	0.00E+00	N/A	N/A
Zinc-65	Ci	0.00E+00	0.00E+00	N/A	N/A
Iron-59	Ci	0.00E+00	0.00E+00	N/A	N/A
Manganese-54	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-131	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-132	Ci	0.00E+00	0.00E+00	N/A	N/A
Iodine-133	Ci	0.00E+00	0.00E+00	N/A	N/A
Cerium-141	Ci	0.00E+00	0.00E+00	N/A	N/A
Cerium-144	Ci	0.00E+00	0.00E+00	N/A	N/A
Cobalt-58	Ci	0.00E+00	0.00E+00	N/A	N/A
Silver-110m	Ci	0.00E+00	0.00E+00	N/A	N/A
Molybdenum-99	Ci	0.00E+00	0.00E+00	N/A	N/A
Unidentified	Ci	N/A	N/A	N/A	N/A
Total For Period	Ci	3.11E-06	(1)	N/A	N/A

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4

4.0 Tritium

Hydrogen-3	Ci	3.83E-01	3.83E-01	N/A	N/A

(1) Data is not available for submission at this time, supplemental report will follow.

NOTE: Fuel Building Exhaust Vent and Radwaste Building Exhaust Vent are considered ground level release points.

TABLE 6

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1991 YEAR
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	Quarter 3	Quarter 4	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	4.31E-02	(4)	1.42E+01
2. Average diluted concentration during period	uCi/ml	4.00E-08	(4)	
3. Percent of applicable limit (1)	%	3.45	(4)	
B. Tritium				
1. Total release	Ci	8.54E+00	6.44E+00	1.42E+01
2. Average diluted concentration during period	uCi/ml	7.92E-06	6.77E-06	
3. Percent of applicable limit (2)	%	0.264	0.226	
C. Dissolved and entrained gases				
1. Total release	Ci	0.226	0.120	1.42E+01
2. Average diluted concentration during period	uCi/ml	2.10E-07	1.26E-07	
3. Percent of applicable limit (3)	%	0.105	0.063	

	Unit	Quarter 3	Quarter 4	Est. Total Error %

D. Gross alpha radioactivity

1. Total release	Ci	0.00E+00	0.00E+00	1.42E+01

Unit	Quarter 3	Quarter 4	Est. Total Error %

E. Volume of waste released (prior to dilution)

Liters	4.23E+06	3.78E+06	8.73E-01

F. Volume of dilution water

Liters	1.08E+09	9.52E+08	5.70E-01

(1) One quarter of 5 Ci annual limit (1.25 Ci) for liquid releases is the applicable limit from 10CFR50 Appendix I, except for tritium and dissolved or entrained noble gases.

(2) 10CFR20, Appendix B, Table II, Column 2 MPC limit of 3.00-03 uCi/ml for tritium.

(3) Technical Specification 3.11.1.1 limit of 2.00E-04 uCi/ml for dissolved or entrained noble gases in liquid effluents.

(4) Data is not available at this time, supplemental report will follow.

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1991 YEAR
LIQUID EFFLUENTS 3/4 QUARTERS

G. Particulates

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4
Hydrogen-3	Ci	N/A	N/A	8.54E+00	6.44E+00
Arsenic-76	Ci	N/A	N/A	2.29E-05	2.01E-05
Strontium-89	Ci	N/A	N/A	0.00E+00	(1)
Strontium-90	Ci	N/A	N/A	0.00E+00	(1)
Strontium-91	Ci	N/A	N/A	2.70E-05	0.00E+00
Strontium-92	Ci	N/A	N/A	0.00E+00	2.50E-05
Cesium-134	Ci	N/A	N/A	0.00E+00	0.00E+00
Cesium-137	Ci	N/A	N/A	0.00E+00	3.45E-05
Iodine-131	Ci	N/A	N/A	2.56E-04	1.43E-03
Iodine-132	Ci	N/A	N/A	0.00E+00	0.00E+00
Iodine-133	Ci	N/A	N/A	1.85E-04	6.14E-04
Iodine-134	Ci	N/A	N/A	0.00E+00	0.00E+00
Iodine-135	Ci	N/A	N/A	0.00E+00	2.54E-05
Sodium-24	Ci	N/A	N/A	0.00E+00	0.00E+00
Cobalt-57	Ci	N/A	N/A	8.71E-06	0.00E+00
Cobalt-58	Ci	N/A	N/A	3.74E-04	4.63E-03
Cobalt-60	Ci	N/A	N/A	8.45E-03	3.99E-02
Iron-55	Ci	N/A	N/A	0.00E+00	(1)
Iron-59	Ci	N/A	N/A	2.75E-04	5.90E-03
Zinc-65	Ci	N/A	N/A	1.23E-04	1.67E-03
Manganese-54	Ci	N/A	N/A	2.03E-03	1.62E-02
Manganese-56	Ci	N/A	N/A	0.00E+00	0.00E+00
Chromium-51	Ci	N/A	N/A	1.99E-02	6.35E-02
Zirconium-95	Ci	N/A	N/A	5.66E-05	3.50E-04
Niobium-95	Ci	N/A	N/A	1.66E-05	6.47E-04
Niobium-97	Ci	N/A	N/A	2.50E-05	4.40E-04
Molybdenum-99	Ci	N/A	N/A	8.56E-04	1.39E-03

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4
Technicium-99m	Ci	N/A	N/A	5.09E-04	5.91E-04
Barium-140	Ci	N/A	N/A	2.00E-04	2.29E-03
Lanthanum-140	Ci	N/A	N/A	8.32E-03	1.39E-02
Cerium-141	Ci	N/A	N/A	2.00E-04	1.33E-03
Cerium-144	Ci	N/A	N/A	0.00E+00	0.00E+00
Antimony-122	Ci	N/A	N/A	0.00E+00	0.00E+00
Antimony-124	Ci	N/A	N/A	6.66E-05	1.62E-03
Rhodium-105	Ci	N/A	N/A	1.26E-04	0.00E+00
Bromine-82	Ci	N/A	N/A	0 00E+00	0.00E+00
Neptunium-239	Ci	N/A	N/A	1.27E-05	3.12E-04
Yttrium-91m	Ci	N/A	N/A	2.96E-05	0.00E+00
Yttrium-92	Ci	N/A	N/A	6.25E-04	3.16E-04
Silver-110m	Ci	N/A	N/A	7.78E-05	4.47E-04
Tungsten-187	Ci	N/A	N/A	0.00E+00	0.00E+00
Copper-64	Ci	N/A	N/A	0.00E+00	0.00E+00
Tin-113	Ci	N/A	N/A	0.00E+00	1.02E-04
Tellurium-132	Ci	N/A	N/A	0.00E+00	2.57E-05
Ruthenium-103	Ci	N/A	N/A	3.09E-05	6.65E-04
Ruthenium-105	Ci	N/A	N/A	3.40E-04	3.07E-04
Total For Period	Ci	N/A	N/A	8.58E+00	(1)

(1) Data is not available at this time, supplemental report will follow.

H. DISSOLVED AND ENTRAINED GASES

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter 3	Quarter 4	Quarter 3	Quarter 4
Argon-41	Ci	N/A	N/A	0.00E+00	0.00E+00
Krypton-85m	Ci	N/A	N/A	0.00E+00	0.00E+00
Krypton-85	Ci	N/A	N/A	0.00E+00	0.00E+00
Krypton-87	Ci	N/A	N/A	0.00E+00	0.00E+00
Krypton-88	Ci	N/A	N/A	0.00E+00	0.00E+00
Xenon-131m	Ci	N/A	N/A	0.00E+00	2.11E-04
Xenon-133m	Ci	N/A	N/A	4.16E-03	2.03E-03
Xenon-133	Ci	N/A	N/A	8.02E-02	4.30E-02
Xenon-135m	Ci	N/A	N/A	4.06E-05	0.00E+00
Xenon-135	Ci	N/A	N/A	1.41E-01	7.43E-02
Xenon-137	Ci	N/A	N/A	0.00E+00	0.00E+00
Xenon-138	Ci	N/A	N/A	0.00E+00	0.00E+00
Unidentified	Ci	N/A	N/A	N/A	N/A
Total For Period	Ci	N/A	N/A	2.26E-01	1.20E-01

TABLE 7

Effluent and Waste Disposal Semiannual Report 1991 Year

Solid Waste and Irradiated Fuel Shipments
Reporting Period January, 1991 to June, 1991 Qtr 1/2

A. SOLID WASTE SHIPPED FOR BURIAL OR DISPOSAL (Not Irradiated Fuel)

1. Type of waste	Unit	6-Month Period	Waste Class	Est. Total Error, %
a. Spent resin, filters, sludges, evaporator bottoms, ect.	**m3 Ci	0.00 0.00	N/A	N/A
b. Dry compressible wastes, contaminated equip., etc.	**m3 Ci	42.40 3.66	A-U	See Below
c. Irradiated components, control rods, etc.	**m3 Ci	0.00 0.00	N/A	N/A
d. Other (None)	**m3 Ci	0.00 0.00	N/A	N/A

Radwaste Estimated Total Error (%)
Waste types considered are processed solid wastes (i.e. resins, filter media, ect.) and Dry Active Waste(DAW) - Compactable/Non-compactable.

1. Possible Errors
   a. Volume
   b. Representative Sampling
   c. Instrument/Counting
   d. Dose to Curie calculations
2. Volume Error
   Radwaste vendor personnel have stated that level indication can be determined to ±0.5 inches. This correlates to approximately 1.0%. Container manufacturer stated design tolerance allows for 1.0% deviation from container dimensions.
3. Representative Sampling Error
   Sampling error for processed resins is based upon obtaining a representative sample from the waste being processed using an iso-lock sampler. Sampling error for Dry Active Wastes is based upon obtaining a representative sample from the material being packaged. This error is assumed to be ± 10%, which is consistent with industry standards.
4. Instrument/Counting Error
   Error caused by the sample geometry, counting time, sample activity, and instrument background is estimated by Chemistry to be ±10%. The error for radiological survey instruments is estimated by Radiation Protection to be ±20%.
5. Dose to Curie Calculations
   The I/6En formula is used to calculate Dose to Curie activities. This method suffers from analytical accuracy in that certain important parameters are neglected. These parameters are geometry of package, measuring instruments characteristics, build-up, internal attenuation effect, and and external media attenuation. An activity correction factor is applied to provide adjustment for these factors.

** - Volume considered to be the total disposal volume of the container.

2. ESTIMATES OF MAJOR NUCLIDES BY WASTE STREAM

Type of Waste	Spent resin, filters sludges, evaporator bottoms, etc.		Dry compressible waste, contaminated equipment, etc.		Irradiated components, control rods, etc.	Other (None)
Principle Radionuclides Identity and % Abundance	Isotope	Percent Abundance	Isotope	Percent Abundance	N/A	N/A
	N/A	N/A	Co-60 Fe-55 Mn-54 Zn-65 C-14 Ni-63 Cr-51 Co-58 Pu-241 Cs-137 Pu-238 Pu-239/40 Am-241 Cm-242 Cm-243/44	61.500% 22.300% 8.930% 2.740% 1.720% 1.280% 0.690% 0.360% 0.230% 0.180% 0.001% 0.001% 0.000% 0.000% 0.000%		
Determined by: A. measurement B. estimation C. measurment/ correlation	N/A		C		N/A	N/A
Type of Container	N/A		Strong, Tight Containers		N/A	N/A
Solidification Agent or Absorbant	N/A		None		N/A	N/A

3. SOLID WASTE DISPOSITION

Number of Shipments	Mode of Transportation	Destination
18	Truck	Barnwell, S.C.

B. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments	Mode of Transportation	Destination
Zero (0)	N/A	N/A

TABLE 7

Effluent and Waste Disposal Semiannual Report 1991 Year

Solid Waste and Irradiated Fuel Shipments
Reporting Period July, 1991 to December, 1991 Qtr 3/4

A. SOLID WASTE SHIPPED FOR BURIAL OR DISPOSAL (Not Irradiated Fuel)

1. Type of waste	Unit	6-Month Period	Waste Class	Est. Total Error, %
a. Spent resin, filters, sludges, evaporator bottoms, ect.	**m3 Ci	123.4 86.6	A-U A-S B	See Below
b. Dry compressible wastes, contaminated equip., etc.	**m3 Ci	2.83E-3 4.94E-4	A-U	See Below
c. Irradiated components, control rods, etc.	**m3 Ci	0.0 0.0	N/A	N/A
d. Other (None)	**m3 Ci	0.0 0.0	N/A	

Radwaste Estimated Total Error (%)
Waste types considered are processed solid wastes (i.e. resins, filter media, ect.) and Dry Active Waste(DAW) - Compactable/Non-compactable.

1. Possible Errors
   a. Volume
   b. Representative Sampling
   c. Instrument/Counting
   d. Dose to Curie calculations
2. Volume Error
   Radwaste vendor personnel have stated that level indication can be determined to ±0.5 inches. This correlates to approximately 1.0%. Container manufacturer stated design tolerance allows for 1.0% deviation from container dimensions.
3. Representative Sampling Error
   Sampling error for processed resins is based upon obtaining a representative sample from the waste being processed using an iso-lock sampler. Sampling error for Dry Active Wastes is based upon obtaining a representative sample from the material being packaged. This error is assumed to be ± 10%, which is consistent with industry standards.
4. Instrument/Counting Error
   Error caused by the sample geometry, counting time, sample activity, and instrument background is estimated by Chemistry to be ±10%. The error for radiological survey instruments is estimated by Radiation Protection to be ±20%.
5. Dose to Curie Calculations
   The I/6En formula is used to calculate Dose to Curie activities. This method suffers from analytical accuracy in that certain important parameters are neglected. These parameters are geometry of package, measuring instruments characteristics, build-up, internal attenuation effect, and and external media attenuation. An activity correction factor is applied to provide adjustment for these factors.

** - Volume considered to be the total disposal volume of the container.

2. ESTIMATES OF MAJOR NUCLIDES BY WASTE STREAM

Type of Waste	Spent resin, filters sludges, evaporator bottoms, etc.		Dry compressible waste, contaminated equipment, etc.		Irradiated components, control rods, etc.	Other (None)
Principle Radionuclides Identity and % Abundance	Isotope	Percent Abundance	Isotope	Percent Abundance	N/A	N/A
	Co-60	59.750%	Co-60	61.500%		
	Mn-54	14.749%	Fe-55	22.300%		
	Sr-89	6.802%	Mn-54	8.930%		
	Fe-55	4.162%	Zn-65	2.740%		
	Cs-137	3.084%	C-14	1.720%		
	Cs-134	2.795%	Ni-63	1.280%		
	Cr-51	2.635%	Cr-51	0.690%		
	Zn-65	1.634%	Co-58	0.360%		
	Co-58	1.244%	Pu-241	0.230%		
	Ni-63	1.057%	Cs-137	0.180%		
	Ba/La -140	0.784%	Pu-238	0.001%		
	H-3	0.749%	Pu-239/40	0.001%		
	Sr-90	0.273%	Am-241	0.000%		
	Fe-59	0.227%	Cm-242	0.000%		
	Ce-144	0.032%	Cm-243/44	0.000%		
	I-131	0.014%				
	C-14	0.009%				
	Pu-238	0.000%				
	Pu-239/40	0.000%				
	Cm-242	0.000%				
	Pu-241	0.000%				
	I-129	0.000%				
	Tc-99	0.000%				
	Nb-94	0.000%				
	Ni-59	0.000%				
Determined by: A. measurement B. estimation C. measurment/ correlation	C		C		N/A	N/A
Type of Container	Strong, Tight Liners		Strong, Tight Containers		N/A	N/A
Solidification Agent or Absorbant	Cement - 1 Liner and None - 21 Liners		None		N/A	N/A

3. SOLID WASTE DISPOSITION

Number of Shipments	Mode of Transportation	Destination
23	Truck	Barnwell, S.C.

B. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments	Mode of Transportation	Destination
Zero (0)	N/A	N/A

TABLE 8

Maximum Individual Doses Due to
Noble Gaseous Releases
1991

	Critical Sector	Critical Distance	Whole Body Dose* (mrem)	Skin Dose* (mrem)
1st Quarter	NW	960m	1.70E-01	3.40E-01
2nd Quarter	NW	960m	3.70E-01	7.30E-01
Semi-Annual Total			5.40E-01	1.10E+00
3rd Quarter	NW	960m	1.90E-01	4.10E-01
4th Quarter	NW	960m	1.40E-01	2.70E-01
Semi-Annual Total			3.30E-01	6.80E-01
Annual Total			8.70E-01	1.80E+00

*All age groups equally exposed

TABLE 9

Maximum Individual Doses (Gaseous) Due To Gaseous Releases (H3, Radioiodines and Particulates) 1991

Significant Organ Dose (mrem)					
	Critical Sector	Critical* Distance	Critical Age Group	Critical Organ	Critical Dose
1st Quarter	NW	960m	Child	Thyroid	2.20E-01
2nd Quarter	NW	960m	Child	Thyroid	5.50E-01
Semi-Annual Total					7.70E-01
3rd Quarter	NW	960m	Child	Thyroid	1.60E-01
4th Quarter	NW	960m	Child	Thyroid	3.80E-01
Semi-Annual Total					5.40E-01
Annual Total					1.30E+00

*The 960m maximum individual includes a "control cow" at 4.5 miles in the NW sector

TABLE 10

Maximum Individual Doses (Liquid)
1991

Critical Receptor: Edge of Initial Mixing Zone

	Whole Body Dose (mrem)		Significant Organ Dose (mrem)		
	Critical Age	Dose	Critical Age	Critical Organ	Dose
1st Quarter	Teen	5.90E-03	Adult	GI Tract	7.90E-02
2nd Quarter	Child	3.70E-03	Adult	GI Tract	2.20E-02
Semi-Annual Total		9.60E-03			1.01E-01
3rd Quarter	Teen	4.10E-03	Adult	GI Tract	5.20E-02
4th Quarter	Teen	3.80E-02	Adult	GI Tract	4.30E-01
Semi-Annual Total		4.20E-02			4.80E-01
Annual Total		5.20E-02			5.80E-01

TABLE 11

SEMI-ANNUAL POPULATION DOSE (GASEOUS)
RELEASED OCCURRING 01/01/91 THROUGH 06/30/91

PATHWAY	WHOLE BODY DOSE (MAN-REM)	THYROID DOSE (MAN-REM)
SUBMERSION IN NOBLE GASES		
1st Quarter	1.70E-01	1.70E-01
2nd Quarter	1.30E-01	1.30E-01
CONTAMINATED GROUND		
1st Quarter	1.00E-04	1.00E-04
2nd Quarter	6.80E-05	6.80E-05
INHALATION		
1st Quarter	1.60E-03	7.70E-02
2nd Quarter	1.30E-03	4.70E-02
VEGETATION CONSUMPTION		
1st Quarter	8.70E-04	7.00E-02
2nd Quarter	9.30E-04	6.70E-02
COW MILK CONSUMPTION		
1st Quarter	1.70E-04	4.90E-02
2nd Quarter	1.70E-04	4.70E-02
BEEF CONSUMPTION		
1st Quarter	1.80E-04	9.10E-03
2nd Quarter	1.90E-04	8.30E-03
Total	3.10E-01	6.70E-01
AVERAGE DOSE TO INDIVIDUALS IN POPULATION (MREM)		
1st Quarter	1.50E-04	3.20E-04
2nd Quarter	1.10E-04	2.60E-04
Total	2.60E-04	5.80E-04

TABLE 11

SEMI-ANNUAL POPULA[illegible]ON DOSE (GASEOUS)
RELEASED OCCURRING 07[illegible]1/91 THROUGH 12/31/91

PATHWAY	WHOLE BODY DOSE (MAN-REM)	THYROID DOSE (MAN-REM)
SUBMERSION IN NOBLE GASES		
3rd Quarter	3.00E-01	3.00E-01
4th Quarter	2.50E-01	2.50E-01
CONTAMINATED GROUND		
3rd Quarter	7.20E-05	7.20E-05
4th Quarter	5.30E-04	5.30E-04
INHALATION		
3rd Quarter	2.10 E-03	7.30E-02
4th Quarter	1.40E-03	5.10E-02
VEGETATION CONSUMPTION		
3rd Quarter	9.30E-04	4.50E-02
4th Quarter	9.50E-04	5.20E-02
COW MILK CONSUMPTION		
3rd Quarter	2.50E-04	5.80E-02
4th Quarter	1.10E-04	3.00E-02
BEEF CONSUMPTION		
3rd Quarter	2.50E-04	1.00E-02
4th Quarter	1.40E-04	5.30E-03
Total	5.50E-01	8.8E-01
AVERAGE DOSE TO INDIVIDUALS IN POPULATION (MREM)		
3rd Quarter	2.60E-04	4.20E-04
4th Quarter	2.20E-04	3.30E-04
Total	4.80E-04	7.50E-04

TABLE 12
SEMI-ANNUAL POPULATION DOSES (LIQUID)
RELEASES OCCURRING 01/01/91 THROUGH 06/30/91

PATHWAY	TOTAL BODY (MAN-REM)	THYROID (MAN-REM)	SKIN (MAN-REM)
SWIMMING			
1st Quarter	1.10E-05	1.10E-05	1.30E-05
2nd Quarter	2.50E-06	2.50E-06	3.20E-06
BOATING			
1st Quarter	2.10E-05	2.10E-06	2.60E-05
2nd Quarter	4.90E-06	4.90E-06	6.30E-06
POTABLE WATER			
1st Quarter	4.50E-04	7.80E-04	N/A
2nd Quarter	3.40E-04	1.90E-04	N/A
SPORT FISH			
1st Quarter	6.40E-04	4.70E-04	N/A
2nd Quarter	7.70E-04	3.90E-05	N/A
COMMERCIAL FISH			
1st Quarter	1.90E-06	1.10E-06	N/A
2nd Quarter	2.30E-06	1.60E-07	N/A
SHORELINE RECREATION			
1st Quarter	1.20E-03	1.20E-03	N/A
2nd Quarter	2.90E-06	2.90E-04	N/A
TOTAL	3.70E-03	3.00E-03	4.90E-05
AVERAGE DOSE TO INDIVIDUALS IN POPULATION (MREM)			
1st Quarter	2.00E-06	2.10E-06	3.40E-08
2nd Quarter	1.20E-06	4.50E-07	8.20E-09
Total	3.20E-06	2.60E-06	4.20E-08

TABLE 12

SEMI-ANNUAL POPULATION DOSES (LIQUID)
RELEASES OCCURRING 07/01/91 THROUGH 12/31/91

PATHWAY	TOTAL BODY (MAN-REM)	THYROID (MAN-REM)	SKIN (MAN-REM)
SWIMMING			
3rd Quarter	9.00E-06	9.00E-06	1.10E-05
4th Quarter	4.20E-05	4.20E-05	5.00E-05
BOATING			
3rd Quarter	1.80E-05	1.80E-05	2.20E-05
4th Quarter	8.30E-05	8.30E-05	1.00E-04
POTABLE WATER			
3rd Quarter	4.40E-04	6.40E-04	N/A
4th Quarter	7.80E-04	1.80E-03	N/A
SPORT FISH			
3rd Quarter	3.30E-04	2.80E-04	N/A
4th Quarter	4.20E-03	1.50E-03	N/A
COMMERCIAL FISH			
3rd Quarter	9.50E-07	6.70E-07	N/A
4th Quarter	1.20E-05	3.50E-06	N/A
SHORELINE RECREATION			
3rd Quarter	1.20E-03	1.20E-03	N/A
4th Quarter	6.50E-03	6.50E-03	N/A
Total	1.40E-02	1.20E-02	1.80E-04
AVERAGE DOSE TO INDIVIDUALS IN POPULATION (MREM)			
3rd Quarter	1.70E-06	1.80E-06	2.80E-08
4th Quarter	1.00E-05	8.50E-06	1.30E-07
Total	1.20E-05	1.00E-05	1.60E-07

TABLE 13

ASSUMPTIONS/PARAMETERS FOR DOSES TO
MEMBER OF THE PUBLIC INSIDE SITE BOUNDARY

MEMBER OF THE PUBLIC	LOCATION	DISTANCE[1] METERS	SECTOR	DURATION (HR/YEAR)
Private Drivers	North Parking Lot	275	N	125[4]
Visitors to Energy Center	Training Center	1771	N	1.5
Employee[2] Candidate	Personnel Office (across from Training Center)	1771	N	2
Employee[2] Candidate	Service Building	115[3]	ENE	5
People Entering Site Without Consent	Alligator Bayou	2500	SW	40
Casual Drivers	Main Admin Building	500	WNW	76[5]
Tour Group In Bus	North Parking Lot	275	N	1

(1) The approximate distance from main plant vent exhaust to location.

(2) The employee candidate is expected to spend 2 hours in the Personnel Office for initial interviews and 5 hours in the Services Building for interviews with prospective supervisors/co-workers.

(3) Midpoint of building

(4) An individual is assumed to be on site 0.25/hr in the morning and 0.25/hr in the evening, 5 days per week, 50 weeks per year (0.5 hr/day * 5 days/week * 50 weeks/year ≈ 125 hours).

(5) An individual is assumed to be on site 0.5 hr/day.

(6) Liquid pathways dose is not considered due to nature of activities that individuals are engaged in.

TABLE 14

DOSES TO MEMBERS OF THE PUBLIC ON SITE
FROM GASEOUS RELEASES 1991

MEMBER OF THE PUBLIC	RECEPTOR LOCATION	QUARTER	CRITICAL AGE GROUP	CRITICAL ORGAN	CRITICAL ORGAN DOSE (MREM)	WHOLE BODY DOSE (MREM)	SKIN DOSE (MREM)
Private Drivers	North Parking Lot at 275 m N	1st Quarter	Teen	Thyroid	7.10E-03	4.80E-03	9.70E-03
		2nd Quarter	Teen	Thyroid	1.50E-02	1.20E-02	2.40E-02
Semi-Annual Total					2.20E-02	1.70E-02	3.40E-02
Private Drivers	North Parking Lot at 275 m N	3rd Quarter	Teen	Thyroid	7.60E-03	6.50E-03	1.40E-02
		4th Quarter	Teen	Thyroid	1.70E-02	1.40E-02	2.50E-02
Semi-Annual Total					2.50E-02	2.10E-02	3.90E-02
Employee Candidate	Services Building 115 m ENE	1st Quarter	Teen	Thyroid	1.20E-03	9.30E-04	1.90E-03
		2nd Quarter	Teen	Thyroid	1.00E-03	8.60E-04	1.70E-03
Semi-Annual Total					2.20E-03	1.80E-03	3.60E-03
Employee Candidate	Services Building 115 m ENE	3rd Quarter	Teen	Thyroid	2.80E-03	2.40E-03	5.00E-03
		4th Quarter	Teen	Thyroid	1.10E-03	9.10E-04	1.70E-03
Semi-Annual Total					3.90E-03	3.30E-03	6.70E-03

TABLE 14

DOSES TO MEMBERS OF THE PUBLIC ON SITE FROM GASEOUS RELEASES 1991

MEMBER OF THE PUBLIC	RECEPTOR LOCATION	QUARTER	CRITICAL AGE GROUP	CRITICAL ORGAN	CRITICAL ORGAN DOSE (MREM)	WHOLE BODY DOSE (MREM)	SKIN DOSE (MREM)
People Entering Site Without Consent	Alligator Bayou at 2500 m SW	1st Quarter	Teen	Thyroid	1.30E-04	9.70E-05	2.00E-04
		2nd Quarter	Teen	Thyroid	8.70E-05	8.70E-05	1.70E-04
Semi-Annual Total					2.20E-04	1.80E-04	3.70E-04
People Entering Site Without Consent	Alligator Bayou at 2500 m SW	3rd Quarter	Teen	Thyroid	1.90E-04	1.60E-04	3.40E-04
		4th Quarter	Teen	Thyroid	9.50E-03	7.80E-03	1.50E-02
Semi-Annual Total					9.70E-03	8.00E-03	1.50E-02
Casual Visitor	Main Admin at 500 m WNW	1st Quarter	Teen	Thyroid	3.80E-03	2.70E-03	5.60E-03
		2nd Quarter	Teen	Thyroid	6.30E-03	4.80E-03	9.60E-03
Semi-Annual Total					1.00E-03	7.50E-03	1.50E-02
Casual Visitor	Main Admin at 500 m WNW	3rd Quarter	Teen	Thyroid	5.30E-03	4.70E-03	1.00E-02
		4th Quarter	Teen	Thyroid	2.60E-04	2.20E-04	4.10E-04
Semi-Annual Total					5.60E-03	4.90E-03	1.00E-02

TABLE 15

METEOROLOGICAL DATA

1991

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	7	15	12	19	27	74	68	1	0	0	0	0	223
NNE	2	3	8	47	42	81	21	0	0	0	0	0	194
NE	7	12	1	15	35	45	12	0	0	0	0	0	127
ENE	12	23	19	24	21	30	29	0	0	0	0	0	158
E	6	19	12	17	11	13	2	0	0	0	0	0	80
ESE	4	6	7	15	30	33	11	0	0	0	0	0	106
SE	3	7	7	26	52	74	13	1	0	0	0	0	183
SSE	2	3	2	9	10	36	97	18	0	0	0	0	177
S	0	2	2	2	8	37	55	15	2	0	0	0	123
SSW	2	3	2	9	13	32	37	13	0	0	0	0	111
SW	3	3	2	6	12	16	19	0	0	0	0	0	61
WSW	1	3	5	11	10	15	6	0	0	0	0	0	51
W	2	4	20	16	7	16	8	0	0	0	0	0	73
WNW	2	15	11	26	11	18	9	1	0	0	0	0	93
NW	4	16	9	24	24	31	27	2	0	0	0	0	137
NNW	4	12	8	9	15	52	61	13	0	0	0	0	174
TOTAL	61	146	127	265	328	603	475	64	2	0	0	0	2071

NUMBER OF CALMS: 7
NUMBER OF INVALID HOURS: 82
NUMBER OF VALID HOURS: 2078
TOTAL HOURS FOR THE PERIOD: 2160

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	0	1	5	0	0	0	0	0	6
NNE	0	0	0	0	2	7	7	0	0	0	0	0	16
NE	0	0	0	0	1	14	6	0	0	0	0	0	21
ENE	0	0	0	1	4	12	4	0	0	0	0	0	21
E	0	0	0	0	1	2	0	0	0	0	0	0	3
ESE	0	0	0	2	3	10	1	0	0	0	0	0	16
SE	0	0	0	0	4	17	2	0	0	0	0	0	23
SSE	0	0	0	0	0	3	15	1	0	0	0	0	19
S	0	0	0	0	1	2	6	4	0	0	0	0	13
SSW	0	0	0	0	0	0	1	0	0	0	0	0	1
SW	0	0	0	0	0	0	1	0	0	0	0	0	1
WSW	0	0	0	0	0	1	1	0	0	0	0	0	2
W	0	0	0	0	0	2	1	0	0	0	0	0	3
WNW	0	0	0	0	0	1	0	0	0	0	0	0	1
NW	0	0	0	0	0	0	2	0	0	0	0	0	2
NNW	0	0	0	0	0	3	0	1	0	0	0	0	4
TOTAL	0	0	0	3	16	75	52	6	0	0	0	0	152

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 152
TOTAL HOURS FOR THE PERIOD: 152

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/91 0100 TO 3/11/91 2310O

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	1	1	4	1	0	0	0	0	7
NNE	0	0	0	0	0	0	5	0	0	0	0	0	5
NE	0	0	0	0	1	2	1	0	0	0	0	0	4
ENE	0	0	0	1	2	4	1	0	0	0	0	0	8
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	2	0	1	0	0	0	0	0	3
SE	0	0	0	0	1	4	0	0	0	0	0	0	5
SSE	0	0	0	0	2	2	6	0	0	0	0	0	10
S	0	0	0	0	0	2	7	2	2	0	0	0	13
SSW	0	0	0	0	0	1	1	4	0	0	0	0	6
SW	0	0	0	0	0	0	2	0	0	0	0	0	2
WSW	0	0	0	0	0	2	4	0	0	0	0	0	6
W	0	0	0	0	1	3	4	0	0	0	0	0	8
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1
NW	0	0	0	0	0	2	5	0	0	0	0	0	7
NNW	0	0	0	0	0	0	4	4	0	0	0	0	8
TOTAL	0	0	0	1	10	23	46	11	2	0	0	0	93

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 93
TOTAL HOURS FOR THE PERIOD: 93

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	0	0	5	0	0	0	0	0	5
NNE	0	0	0	0	2	1	1	0	0	0	0	0	4
NE	0	0	0	0	2	1	0	0	0	0	0	0	3
ENE	0	0	0	0	1	1	0	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	1	0	0	0	0	0	0	0	1
SE	0	0	0	0	2	0	0	0	0	0	0	0	2
SSE	0	0	0	0	0	1	1	0	0	0	0	0	2
S	0	0	0	0	0	0	3	0	0	0	0	0	3
SSW	0	0	0	0	0	1	3	2	0	0	0	0	6
SW	0	0	0	0	0	1	2	0	0	0	0	0	3
WSW	0	0	0	0	0	1	1	0	0	0	0	0	2
W	0	0	0	0	1	2	1	0	0	0	0	0	4
WNW	0	0	0	0	0	1	0	0	0	0	0	0	1
NW	0	0	0	0	0	0	2	1	0	0	0	0	3
NNW	0	0	0	0	0	2	3	1	0	0	0	0	6
TOTAL	0	0	0	0	9	12	22	4	0	0	0	0	47

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 47
TOTAL HOURS FOR THE PERIOD: 47

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS 9

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	1	10	15	57	53	0	0	0	0	0	136
NNE	0	0	3	8	23	61	7	0	0	0	0	0	102
NE	0	0	0	3	13	15	1	0	0	0	0	0	32
ENE	0	1	0	9	4	6	14	0	0	0	0	0	34
E	0	1	2	7	6	4	1	0	0	0	0	0	21
ESE	0	0	1	6	11	5	0	0	0	0	0	0	23
SE	0	0	0	8	17	21	2	1	0	0	0	0	49
SSE	0	0	1	6	2	15	63	17	0	0	0	0	104
S	0	1	0	1	4	19	29	9	0	0	0	0	63
SSW	0	0	0	6	9	24	23	6	0	0	0	0	68
SW	0	0	0	2	10	9	10	0	0	0	0	0	30
WSW	0	0	0	6	8	8	0	0	0	0	0	0	22
W	0	0	3	6	4	9	2	0	0	0	0	0	24
WNW	0	0	0	5	6	12	7	1	0	0	0	0	31
NW	0	0	0	5	12	10	12	1	0	0	0	0	40
NNW	0	0	0	1	8	35	52	6	0	0	0	0	102
TOTAL	0	3	11	89	152	317	276	41	0	0	0	0	889

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 889
TOTAL HOURS FOR THE PERIOD: 889

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 1/ 1/91 0100 TO 3/31/91 23100

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	4	6	7	15	1	0	0	0	0	0	34
NNE	1	1	1	15	12	12	1	0	0	0	0	0	43
NE	0	1	1	4	15	12	4	0	0	0	0	0	37
ENE	0	0	1	6	7	6	10	0	0	0	0	0	30
E	0	2	2	7	4	7	1	0	0	0	0	0	23
ESE	0	1	2	7	12	17	9	0	0	0	0	0	48
SE	0	1	7	13	26	32	9	0	0	0	0	0	88
SSE	0	1	1	3	6	14	12	0	0	0	0	0	37
S	0	0	0	0	0	14	10	0	0	0	0	0	24
SSW	0	0	1	2	4	6	9	1	0	0	0	0	23
SW	0	2	1	4	2	7	4	0	0	0	0	0	20
WSW	0	0	1	4	2	3	0	0	0	0	0	0	10
W	0	2	7	10	1	0	0	0	0	0	0	0	20
WNW	0	3	6	12	4	4	1	0	0	0	0	0	30
NW	0	3	4	8	8	11	6	0	0	0	0	0	40
NNW	0	4	3	4	5	12	2	1	0	0	0	0	31
TOTAL	1	22	42	105	115	172	79	2	0	0	0	0	538

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 19
NUMBER OF VALID HOURS: 538
TOTAL HOURS FOR THE PERIOD: 557

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	3	4	3	3	4	0	0	0	0	0	0	0	17
NNE	0	2	2	5	3	0	0	0	0	0	0	0	12
NE	0	1	0	5	1	1	0	0	0	0	0	0	8
ENE	0	0	5	5	2	1	0	0	0	0	0	0	13
E	0	3	2	2	0	0	0	0	0	0	0	0	7
ESE	0	0	2	0	1	1	0	0	0	0	0	0	4
SE	1	2	0	5	0	0	0	0	0	0	0	0	8
SSE	1	1	0	0	0	1	0	0	0	0	0	0	3
S	0	0	1	1	3	0	0	0	0	0	0	0	5
SSW	0	1	1	1	0	0	0	0	0	0	0	0	3
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	3	1	0	0	0	0	0	0	0	0	4
W	0	1	5	0	0	0	0	0	0	0	0	0	6
WNW	1	3	3	9	1	0	0	0	0	0	0	0	17
NW	0	2	3	8	4	0	0	0	0	0	0	0	17
NNW	2	2	2	4	1	0	0	0	0	0	0	0	11
TOTAL	8	22	32	49	20	4	0	0	0	0	0	0	135

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 135
TOTAL HOURS FOR THE PERIOD: 135

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	4	10	4	0	0	0	0	0	0	0	0	0	18
NNE	1	0	2	9	0	0	0	0	0	0	0	0	12
NE	7	10	0	3	2	0	0	0	0	0	0	0	22
ENE	12	22	13	2	1	0	0	0	0	0	0	0	50
E	6	13	6	1	0	0	0	0	0	0	0	0	26
ESE	4	5	2	0	0	0	0	0	0	0	0	0	11
SE	2	4	0	0	2	0	0	0	0	0	0	0	8
SSE	1	1	0	0	0	0	0	0	0	0	0	0	2
S	0	1	1	0	0	0	0	0	0	0	0	0	2
SSW	2	2	0	0	0	0	0	0	0	0	0	0	4
SW	3	1	1	0	0	0	0	0	0	0	0	0	5
WSW	1	3	1	0	0	0	0	0	0	0	0	0	5
W	2	1	5	0	0	0	0	0	0	0	0	0	8
WNW	1	9	2	0	0	0	0	0	0	0	0	0	12
NW	4	11	2	3	0	0	0	0	0	0	0	0	20
NNW	2	6	3	0	1	0	0	0	0	0	0	0	12
TOTAL	52	99	42	18	6	0	0	0	0	0	0	0	217

NUMBER OF CALMS: 7
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 224
TOTAL HOURS FOR THE PERIOD: 224

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	1	5	1	7	13	44	112	29	1	0	0	0	213
NNE	2	1	0	3	16	61	123	5	0	0	0	0	211
NE	1	2	0	4	2	33	101	12	0	0	0	0	155
ENE	0	1	0	1	5	23	66	37	3	0	0	0	136
E	0	0	0	9	7	25	16	16	4	0	0	0	77
ESE	0	0	2	3	4	24	85	45	17	0	0	0	180
SE	0	0	0	0	6	24	73	13	8	0	0	0	124
SSE	0	1	1	2	5	15	82	50	10	0	0	0	166
S	0	0	0	3	4	18	85	36	4	0	0	0	150
SSW	0	0	0	2	9	18	42	23	13	0	0	0	107
SW	0	0	1	0	6	15	24	16	1	0	0	0	63
WSW	0	0	1	7	7	34	18	0	0	0	0	0	67
W	0	1	1	1	8	32	36	3	0	0	0	0	82
WNW	0	3	1	4	8	28	40	5	2	0	0	0	91
NW	0	3	5	4	5	29	53	16	1	0	0	0	116
NNW	0	3	1	3	5	27	77	35	8	0	0	0	159
TOTAL	4	20	14	53	110	450	1033	341	72	0	0	0	2097

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 63
NUMBER OF VALID HOURS: 2097
TOTAL HOURS FOR THE PERIOD: 2160

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .30	.31- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	0	0	2	1	0	0	0	0	3
NNE	0	0	0	0	0	5	12	2	0	0	0	0	19
NE	0	0	0	0	0	2	13	4	0	0	0	0	19
ENE	0	0	0	0	1	4	10	4	0	0	0	0	19
E	0	0	0	0	1	3	5	0	0	0	0	0	9
ESE	0	0	0	0	1	5	16	3	1	0	0	0	26
SE	0	0	0	0	1	2	9	1	0	0	0	0	13
SSE	0	0	0	0	0	0	14	3	0	0	0	0	17
S	0	0	0	0	0	1	4	4	1	0	0	0	10
SSW	0	0	0	0	0	0	3	0	1	0	0	0	4
SW	0	0	0	0	0	0	0	1	0	0	0	0	1
WSW	0	0	0	0	0	0	2	0	0	0	0	0	2
W	0	0	0	0	0	0	3	0	0	0	0	0	3
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1
NW	0	0	0	0	0	0	0	2	0	0	0	0	2
NNW	0	0	0	0	0	1	2	0	1	0	0	0	4
TOTAL	0	0	0	0	4	23	96	25	4	0	0	0	152

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 152
TOTAL HOURS FOR THE PERIOD: 152

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/91 0:00 TO 3/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.9	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	0	1	2	2	1	0	0	0	6
NNE	0	0	0	0	1	0	5	1	0	0	0	0	7
NE	0	0	0	0	1	1	3	1	0	0	0	0	6
ENE	0	0	0	0	0	1	4	1	0	0	0	0	6
E	0	0	0	0	0	0	1	0	0	0	0	0	1
ESE	0	0	0	0	0	1	2	1	1	0	0	0	5
SE	0	0	0	0	0	2	2	0	0	0	0	0	4
SSE	0	0	0	0	0	2	3	4	0	0	0	0	9
S	0	0	0	0	0	2	3	3	2	0	0	0	10
SSW	0	0	0	0	0	0	2	3	3	0	0	0	8
SW	0	0	0	0	0	0	0	3	0	0	0	0	3
WSW	0	0	0	0	0	0	2	0	0	0	0	0	2
W	0	0	0	0	0	1	0	1	0	0	0	0	10
WNW	0	0	0	0	0	1	1	2	0	0	0	0	4
NW	0	0	0	0	0	0	2	3	0	0	0	0	5
NNW	0	0	0	0	0	0	1	4	2	0	0	0	7
TOTAL	0	0	0	0	2	12	41	29	9	0	0	0	93

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 93
TOTAL HOURS FOR THE PERIOD: 93

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	0	0	4	1	0	0	0	0	5
NNE	0	0	0	0	0	3	1	0	0	0	0	0	4
NE	0	0	0	0	0	1	2	0	0	0	0	0	3
ENE	0	0	0	0	0	1	1	0	0	0	0	0	2
E	0	0	0	0	0	0	1	0	0	0	0	0	1
ESE	0	0	0	0	0	1	1	0	0	0	0	0	2
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	2	0	0	0	0	0	2
S	0	0	0	0	0	1	1	1	0	0	0	0	3
SSW	0	0	0	0	0	0	1	2	2	0	0	0	5
SW	0	0	0	0	0	0	3	1	0	0	0	0	4
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	1	5	0	0	0	0	0	6
WNW	0	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	2	1	0	0	0	0	3
NNW	0	0	0	0	0	0	5	1	1	0	0	0	7
TOTAL	0	0	0	0	0	8	29	7	3	0	0	0	47

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 47
TOTAL HOURS FOR THE PERIOD: 47

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/91 0100 TO 3/31/91 2310O

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.32- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	1	5	15	80	24	0	0	0	0	125
NNE	0	0	0	3	0	24	72	2	0	0	0	0	109
NE	0	0	0	1	0	13	32	1	0	0	0	0	47
ENE	0	0	0	1	3	3	18	11	2	0	0	0	38
E	0	0	0	7	3	7	4	6	2	0	0	0	29
ESE	0	0	1	1	0	5	23	10	1	0	0	0	41
SE	0	0	0	0	2	6	19	4	5	0	0	0	36
SSE	0	0	1	0	3	2	34	36	10	0	0	0	86
S	0	0	0	3	1	4	38	21	1	0	0	0	68
SSW	0	0	0	1	4	12	28	9	5	0	0	0	59
SW	0	0	0	0	5	4	14	9	1	0	0	0	33
WSW	0	0	1	4	3	13	5	0	0	0	0	0	26
W	0	0	0	0	2	13	10	2	0	0	0	0	27
WNW	0	0	1	1	2	8	18	1	1	0	0	0	32
NW	0	0	0	0	1	12	24	5	1	0	0	0	43
NNW	0	0	0	0	3	12	44	28	3	0	0	0	90
TOTAL	0	0	4	23	45	153	463	169	32	0	0	0	889

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 889
TOTAL HOURS FOR THE PERIOD: 889

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.2- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	1	3	1	15	14	1	0	0	0	0	36
NNE	0	0	0	0	2	9	23	0	0	0	0	0	34
NE	1	0	0	1	1	5	28	6	0	0	0	0	42
ENE	0	0	0	0	1	7	18	15	1	0	0	0	42
E	0	0	0	0	0	4	3	10	2	0	0	0	21
ESE	0	0	1	1	3	6	33	29	14	0	0	0	87
SE	0	0	0	0	2	6	33	8	3	0	0	0	52
SSE	0	0	0	0	0	3	22	7	0	0	0	0	32
S	0	0	0	0	2	1	33	7	0	0	0	0	43
SSW	0	0	0	0	2	2	8	9	2	0	0	0	23
SW	0	0	0	0	0	2	7	2	0	0	0	0	11
WSW	0	0	0	2	2	9	8	0	0	0	0	0	21
W	0	1	1	1	3	9	8	0	0	0	0	0	23
WNW	0	2	0	3	2	7	11	2	1	0	0	0	28
NW	0	3	5	1	1	6	16	5	0	0	0	0	37
NNW	0	1	1	1	0	5	14	2	1	0	0	0	25
TOTAL	1	8	9	13	22	98	279	103	24	0	0	0	557

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 557
TOTAL HOURS FOR THE PERIOD: 557

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 150 F 10'

WIND SPEED (METERS/SECON

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	1	4	0	1	1	6	6	0	0	0	0	0	19
NNE	2	1	0	0	1	4	4	0	0	0	0	0	12
NE	0	0	0	1	0	3	7	0	0	0	0	0	11
ENE	0	0	0	0	0	3	9	4	0	0	0	0	16
E	0	0	0	1	0	6	2	0	0	0	0	0	9
ESE	0	0	0	1	0	1	3	2	0	0	0	0	7
SE	0	0	0	0	0	3	2	0	0	0	0	0	5
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	5	4	0	0	0	0	0	9
SSW	0	0	0	0	0	1	0	0	0	0	0	0	1
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	3	0	0	0	0	0	0	3
W	0	0	0	0	2	2	2	0	0	0	0	0	6
WNW	0	0	0	0	2	3	7	0	0	0	0	0	12
NW	0	0	0	1	0	6	7	0	0	0	0	0	14
NNW	0	2	0	0	1	1	7	0	0	0	0	0	11
TOTAL	3	7	0	5	7	47	60	6	0	0	0	0	135

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 135
TOTAL HOURS FOR THE PERIOD: 135

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 1/ 1/91 0100 TO 3/31/91 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	2	6	7	4	0	0	0	0	0	19
NNE	0	0	0	0	4	16	6	0	0	0	0	0	26
NE	0	2	0	1	0	8	16	0	0	0	0	0	27
ENE	0	1	0	0	0	4	6	2	0	0	0	0	13
E	0	0	0	1	3	3	0	0	0	0	0	0	7
ESE	0	0	0	0	0	5	7	0	0	0	0	0	12
SE	0	0	0	0	1	5	8	0	0	0	0	0	14
SSE	0	1	0	2	2	8	7	0	0	0	0	0	20
S	0	0	0	0	1	4	2	0	0	0	0	0	7
SSW	0	0	0	1	3	3	0	0	0	0	0	0	7
SW	0	0	1	0	1	9	0	0	0	0	0	0	11
WSW	0	0	0	1	2	9	1	0	0	0	0	0	13
W	0	0	0	0	1	6	0	0	0	0	0	0	7
WNW	0	1	0	0	2	9	2	0	0	0	0	0	14
NW	0	0	0	2	3	5	2	0	0	0	0	0	12
NNW	0	0	0	2	1	8	4	0	0	0	0	0	15
TOTAL	0	5	1	12	30	109	65	2	0	0	0	0	224

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 224
TOTAL HOURS FOR THE PERIOD: 224

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 4/ 1/91 0100 TO 6/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	5	10	11	18	16	10	3	0	0	0	0	0	73
NNE	6	7	11	33	27	12	0	0	0	0	0	0	95
NE	12	6	11	30	30	48	0	0	0	0	0	0	137
ENE	14	11	17	30	22	39	6	0	0	0	0	0	139
E	7	8	8	20	37	14	2	0	0	0	0	0	96
ESE	10	19	25	39	58	19	0	0	0	0	0	0	170
SE	6	19	24	108	101	83	10	1	0	0	0	0	352
SSE	5	8	11	46	80	81	92	10	0	0	0	0	303
S	6	8	12	24	29	56	41	2	0	0	0	0	178
SSW	1	3	5	22	14	29	8	0	0	0	0	0	82
SW	6	6	6	20	18	7	0	0	0	0	0	0	63
WSW	7	3	5	16	11	7	2	1	0	0	0	0	52
W	7	6	4	14	16	14	0	0	0	0	0	0	63
WNW	10	9	6	10	13	14	0	0	0	0	0	0	66
NW	15	8	8	12	6	7	0	0	0	0	0	0	56
NNW	7	7	10	17	11	17	11	0	0	0	0	0	80
TOTAL	131	138	174	468	469	456	175	14	0	0	0	0	2005

NUMBER OF CALMS: 18
NUMBER OF INVALID HOURS: 161
NUMBER OF VALID HOURS: 2023
TOTAL HOURS FOR THE PERIOD: 2184

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 1/ 1/91 0100 TO 6/30/91 2400

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	1	3	2	1	0	0	0	0	0	7
NNE	0	0	0	4	7	8	0	0	0	0	0	0	19
NE	0	0	1	5	10	10	0	0	0	0	0	0	26
ENE	0	0	1	6	7	24	6	0	0	0	0	0	44
E	0	0	0	5	13	9	1	0	0	0	0	0	28
ESE	0	0	0	10	28	11	0	0	0	0	0	0	49
SE	0	0	0	12	28	51	6	0	0	0	0	0	97
SSE	0	0	0	3	6	34	18	6	0	0	0	0	67
S	0	0	0	0	2	25	18	2	0	0	0	0	47
SSW	0	0	0	0	4	11	3	0	0	0	0	0	18
SW	0	0	0	0	4	2	0	0	0	0	0	0	6
WSW	0	0	1	1	2	3	0	0	0	0	0	0	7
W	0	0	0	3	3	7	0	0	0	0	0	0	13
WNW	0	0	0	2	3	5	0	0	0	0	0	0	10
NW	0	0	0	0	1	0	0	0	0	0	0	0	1
NNW	0	0	0	0	1	0	2	0	0	0	0	0	3
TOTAL	0	0	3	52	122	202	55	8	0	0	0	0	442

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 1
NUMBER OF VALID HOURS: 442
TOTAL HOURS FOR THE PERIOD: 443

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 4/ 1/91 0100 TO 6/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	2	0	2	0	0	0	0	0	0	4
NNE	0	0	0	1	2	0	0	0	0	0	0	0	3
NE	0	0	0	1	3	1	0	0	0	0	0	0	5
ENE	0	0	0	2	0	1	0	0	0	0	0	0	3
E	0	0	0	2	0	0	0	0	0	0	0	0	2
ESE	0	0	0	2	3	0	0	0	0	0	0	0	5
SE	0	0	0	1	3	2	0	0	0	0	0	0	6
SSE	0	0	1	2	1	1	9	1	0	0	0	0	15
S	0	0	0	0	5	8	5	0	0	0	0	0	18
SSW	0	0	0	2	2	7	2	0	0	0	0	0	13
SW	0	0	0	1	0	1	0	0	0	0	0	0	2
WSW	0	0	0	2	0	1	0	0	0	0	0	0	3
W	0	0	0	1	3	4	0	0	0	0	0	0	8
WNW	0	0	0	0	4	3	0	0	0	0	0	0	7
NW	0	0	0	1	0	2	0	0	0	0	0	0	3
NNW	0	0	0	0	0	0	5	0	0	0	0	0	5
TOTAL	0	0	1	20	26	33	21	1	0	0	0	0	102

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 1
NUMBER OF VALID HOURS: 102
TOTAL HOURS FOR THE PERIOD: 103

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/91 0100 TO 6/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18.0	TOT.
N	0	0	1	0	1	2	0	0	0	0	0	0	4
NNE	0	0	1	1	0	0	0	0	0	0	0	0	2
NE	0	0	1	0	1	0	0	0	0	0	0	0	2
ENE	0	0	1	1	1	0	0	0	0	0	0	0	3
E	0	0	0	0	1	0	0	0	0	0	0	0	1
ESE	0	0	1	1	1	0	0	0	0	0	0	0	3
SE	0	0	0	3	1	3	0	0	0	0	0	0	7
SSE	0	0	0	0	1	1	6	1	0	0	0	0	9
S	0	0	0	0	3	3	3	0	0	0	0	0	9
SSW	0	0	0	0	0	2	1	0	0	0	0	0	3
SW	0	0	0	1	2	0	0	0	0	0	0	0	3
WSW	0	0	0	0	1	0	0	0	0	0	0	0	1
W	0	0	0	1	1	0	0	0	0	0	0	0	2
WNW	0	0	0	0	2	2	0	0	0	0	0	0	4
NW	0	0	0	0	0	2	0	0	0	0	0	0	2
NNW	0	0	0	0	0	2	2	0	0	0	0	0	4
TOTAL	0	0	6	8	16	17	12	1	0	0	0	0	59

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 59
TOTAL HOURS FOR THE PERIOD: 59

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/91 0100 TO 6/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	0	4	7	3	2	0	0	0	0	0	17
NNE	0	0	1	6	1	3	0	0	0	0	0	0	11
NE	1	0	0	6	1	11	0	0	0	0	0	0	22
ENE	0	1	3	3	1	8	0	0	0	0	0	0	19
E	0	2	0	5	7	0	0	0	0	0	0	0	14
ESE	0	0	3	6	7	3	0	0	0	0	0	0	19
SE	0	0	2	11	15	7	2	0	0	0	0	0	37
SSE	0	1	1	11	20	36	33	1	0	0	0	0	103
S	0	0	2	7	6	11	14	0	0	0	0	0	43
SSW	0	0	0	4	4	8	1	0	0	0	0	0	22
SW	0	1	1	1	7	3	0	0	0	0	0	0	14
WSW	0	0	0	4	5	2	1	1	0	0	0	0	13
W	0	1	1	5	1	2	0	0	0	0	0	0	10
WNW	0	0	2	3	2	3	0	0	0	0	0	0	10
NW	0	0	2	1	4	3	0	0	0	0	0	0	10
NNW	0	0	0	8	8	12	2	0	0	0	0	0	30
TOTAL	1	7	18	98	108	108	69	2	0	0	0	0	407

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 407
TOTAL HOURS FOR THE PERIOD: 407

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 4/ 1/91 0100 TO 6/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	18	TOT.
N	1	4	6	7	3	1	0	0	0	0	0	0	22
NNE	0	4	3	13	9	1	0	0	0	0	0	0	30
NE	2	3	2	14	9	26	0	0	0	0	0	0	56
ENE	2	3	3	17	8	6	0	0	0	0	0	0	37
E	2	4	5	7	11	5	1	0	0	0	0	0	38
ESE	3	10	15	17	18	5	0	0	0	0	0	0	68
SE	2	12	16	69	48	19	2	1	0	0	0	0	169
SSE	0	2	5	25	18	19	16	1	0	0	0	0	86
S	1	4	7	17	12	6	1	0	0	0	0	0	48
SSW	0	1	2	9	4	1	1	0	0	0	0	0	18
SW	0	3	2	10	5	1	0	0	0	0	0	0	21
WSW	1	1	1	4	4	1	1	0	0	0	0	0	12
W	3	2	3	4	5	1	0	0	0	0	0	0	18
WNW	3	4	1	4	2	0	0	0	0	0	0	0	14
NW	1	2	3	8	1	0	0	0	0	0	0	0	15
NNW	2	5	4	4	2	3	0	0	0	0	0	0	20
TOTAL	23	64	78	229	161	95	22	2	0	0	0	0	674

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 675
TOTAL HOURS FOR THE PERIOD: 675

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 1/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-10.0	>18	TOT.
N	3	3	2	3	1	0	0	0	0	0	0	0	12
NNE	1	1	5	7	5	0	0	0	0	0	0	0	19
NE	4	1	7	3	3	0	0	0	0	0	0	0	18
ENE	1	3	7	1	2	0	0	0	0	0	0	0	17
E	4	2	2	0	2	0	0	0	0	0	0	0	10
ESE	5	9	5	3	1	0	0	0	0	0	0	0	23
SE	3	6	5	11	6	1	0	0	0	0	0	0	32
SSE	4	4	3	3	4	0	0	0	0	0	0	0	18
S	2	3	3	0	1	0	0	0	0	0	0	0	9
SSW	0	1	3	2	0	0	0	0	0	0	0	0	6
SW	4	1	2	2	0	0	0	0	0	0	0	0	9
WSW	2	0	2	0	0	0	0	0	0	0	0	0	4
W	1	2	0	0	0	0	0	0	0	0	0	0	6
WNW	6	3	3	1	0	0	0	0	0	0	0	0	13
NW	6	3	3	2	0	0	0	0	0	0	0	0	14
NNW	2	1	4	3	0	0	0	0	0	0	0	0	10
TOTAL	54	43	56	47	25	1	0	0	0	0	0	0	220

NUMBER OF CALMS: 5
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 225
TOTAL HOURS FOR THE PERIOD: 225

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	1	2	2	1	1	0	0	0	0	0	0	0	7
NNE	5	2	1	0	0	0	0	0	0	0	0	0	8
NE	5	2	0	1	0	0	0	0	0	0	0	0	8
ENE	8	4	2	0	0	0	0	0	0	0	0	0	14
E	1	0	1	1	0	0	0	0	0	0	0	0	3
ESE	2	0	1	0	0	0	0	0	0	0	0	0	3
SE	1	1	1	1	0	0	0	0	0	0	0	0	4
SSE	1	1	1	2	0	0	0	0	0	0	0	0	5
S	3	1	0	0	0	0	0	0	0	0	0	0	4
SSW	1	1	0	0	0	0	0	0	0	0	0	0	2
SW	2	1	1	2	0	0	0	0	0	0	0	0	6
WSW	4	2	1	0	0	0	0	0	0	0	0	0	7
W	2	1	0	0	0	0	0	0	0	0	0	0	3
WNW	6	2	0	0	0	0	0	0	0	0	0	0	8
NW	8	3	0	0	0	0	0	0	0	0	0	0	11
NNW	3	1	2	2	0	0	0	0	0	0	0	0	8
TOTAL	53	24	13	10	1	0	0	0	0	0	0	0	101

NUMBER OF CALMS: 12
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 113
TOTAL HOURS FOR THE PERIOD: 113

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	3	6	7	20	14	2	0	0	0	0	53
NNE	0	3	2	5	10	37	13	1	0	0	0	0	71
NE	0	0	4	6	9	25	42	0	0	0	0	0	86
ENE	0	0	0	9	12	41	95	61	0	0	0	0	218
E	0	2	1	16	20	29	[illegible]	15	1	0	0	0	147
ESE	0	0	4	18	20	62	173	33	0	0	0	0	310
SE	1	4	1	15	10	87	141	28	3	1	0	0	291
SSE	0	0	2	10	17	60	79	50	5	0	0	0	223
S	0	2	0	5	25	63	75	6	0	0	0	0	176
SSW	0	0	3	12	18	60	28	3	0	0	0	0	124
SW	0	1	2	11	16	34	15	0	0	0	0	0	79
WSW	0	0	0	10	15	18	7	0	1	0	0	0	51
W	0	1	2	7	15	38	10	0	0	0	0	0	73
WNW	0	0	2	4	6	19	7	0	0	0	0	0	38
NW	0	0	4	0	9	9	8	0	0	0	0	0	30
NNW	0	1	0	6	8	18	15	6	0	0	0	0	54
TOTAL	1	15	30	140	217	620	785	205	10	1	0	0	2024

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 159
NUMBER OF VALID HOURS: 2025
TOTAL HOURS FOR THE PERIOD: 2184

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 1/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	0	2	2	0	0	0	0	0	4
NNE	0	0	0	0	0	8	0	0	0	0	0	0	8
NE	0	0	0	0	1	12	9	0	0	0	0	0	22
ENE	0	0	0	0	5	14	21	19	0	0	0	0	59
E	0	0	0	0	2	9	25	12	0	0	0	0	48
ESE	0	0	0	1	3	19	42	12	0	0	0	0	77
SE	0	0	0	0	3	20	39	8	1	0	0	0	71
SSE	0	0	0	0	1	11	23	10	4	0	0	0	49
S	0	0	0	0	1	15	25	2	0	0	0	0	43
SSW	0	0	0	0	0	9	8	3	0	0	0	0	20
SW	0	0	0	0	0	8	3	0	0	0	0	0	11
WSW	0	0	0	1	0	3	0	0	0	0	0	0	4
W	0	0	0	0	0	10	6	0	0	0	0	0	16
WNW	0	0	0	1	1	5	1	0	0	0	0	0	8
NW	0	0	0	0	0	1	0	0	0	0	0	0	1
NNW	0	0	0	0	0	0	1	1	0	0	0	0	2
TOTAL	0	0	0	3	17	146	205	87	5	0	0	0	443

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 443
TOTAL HOURS FOR THE PERIOD: 443

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	1	1	0	0	0	0	0	2
NE	0	0	0	1	3	1	0	0	0	0	0	0	5
ENE	0	0	0	0	0	1	3	1	0	0	0	0	5
E	0	0	0	2	0	0	1	0	0	0	0	0	3
ESE	0	0	0	1	0	3	2	0	0	0	0	0	6
SE	0	0	0	1	0	3	4	1	0	0	0	0	9
SSE	0	0	0	1	1	1	3	5	1	0	0	0	12
S	0	0	0	0	2	5	7	2	0	0	0	0	16
SSW	0	0	0	1	1	6	4	0	0	0	0	0	12
SW	0	0	0	0	1	1	2	0	0	0	0	0	4
WSW	0	0	0	0	2	0	2	0	0	0	0	0	4
W	0	0	0	1	0	8	1	0	0	0	0	0	10
WNW	0	0	0	0	1	4	0	0	0	0	0	0	5
NW	0	0	0	0	0	0	2	0	0	0	0	0	2
NNW	0	0	0	0	2	1	1	4	0	0	0	0	8
TOTAL	0	0	0	8	13	35	33	13	1	0	0	0	103

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 103
TOTAL HOURS FOR THE PERIOD: 103

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	1	0	0	1	0	0	0	0	0	2
NNE	0	0	0	0	0	1	1	0	0	0	0	0	2
NE	0	0	0	0	1	1	0	0	0	0	0	0	2
ENE	0	0	0	1	0	1	2	0	0	0	0	0	4
E	0	0	0	0	0	0	1	0	0	0	0	0	1
ESE	0	0	0	1	0	1	2	3	0	0	0	0	7
SE	0	0	0	1	0	2	0	0	0	0	0	0	3
SSE	0	0	0	0	0	2	2	5	0	0	0	0	9
S	0	0	0	0	1	3	4	1	0	0	0	0	9
SSW	0	0	0	0	0	1	2	0	0	0	0	0	3
SW	0	0	0	1	0	3	0	0	0	0	0	0	4
WSW	0	0	0	0	0	1	0	0	0	0	0	0	1
W	0	0	0	0	1	0	1	0	0	0	0	0	2
WNW	0	0	0	0	1	2	1	0	0	0	0	0	4
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	2	3	0	0	0	0	0	5
TOTAL	0	0	0	5	4	20	21	9	0	0	0	0	59

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 59
TOTAL HOURS FOR THE PERIOD: 59

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	5	11	3	2	0	0	0	0	21
NNE	0	0	0	0	4	5	5	1	0	0	0	0	15
NE	0	0	2	2	1	2	3	0	0	0	0	0	10
ENE	0	0	0	2	0	4	16	14	0	0	0	0	36
E	0	0	0	4	2	4	8	1	0	0	0	0	19
ESE	0	0	0	1	3	5	16	5	0	0	0	0	30
SE	0	0	0	1	2	11	17	9	0	0	0	0	40
SSE	0	0	1	1	3	18	25	26	0	0	0	0	74
S	0	0	0	1	6	11	28	1	0	0	0	0	47
SSW	0	0	1	2	5	9	7	0	0	0	0	0	24
SW	0	0	2	2	6	6	3	0	0	0	0	0	19
WSW	0	0	0	3	7	5	0	0	1	0	0	0	16
W	0	0	0	2	6	10	1	0	0	0	0	0	19
WNW	0	0	0	1	1	2	2	0	0	0	0	0	6
NW	0	0	0	0	5	4	3	0	0	0	0	0	12
NNW	0	0	0	3	3	6	6	1	0	0	0	0	19
TOTAL	0	0	6	25	59	113	143	60	1	0	0	0	407

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 407
TOTAL HOURS FOR THE PERIOD: 407

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	1	1	1	3	1	0	0	0	0	0	10
NNE	0	2	1	1	2	8	1	0	0	0	0	0	18
NE	0	0	1	1	1	5	20	0	0	0	0	0	28
ENE	0	0	0	3	5	15	40	24	0	0	0	0	87
E	0	2	1	8	7	8	24	2	1	0	0	0	53
ESE	0	0	3	6	8	28	76	12	0	0	0	0	133
SE	1	2	0	1	3	37	70	10	2	1	0	0	130
SSE	0	0	0	1	5	20	24	1	0	0	0	0	57
S	0	0	0	2	8	21	11	0	0	0	0	0	42
SSW	0	0	1	5	1	16	6	0	0	0	0	0	32
SW	0	0	0	3	1	9	6	0	0	0	0	0	22
WSW	0	0	0	1	3	6	5	0	0	0	0	0	18
W	0	1	1	3	6	2	1	0	0	0	0	0	14
WNW	0	0	1	1	2	1	2	0	0	0	0	0	7
NW	0	0	3	0	1	2	1	0	0	0	0	0	10
NNW	0	1	0	2	2	7	2	0	0	0	0	0	14
TOTAL	1	8	13	51	65	188	290	52	3	1	0	0	675

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 675
TOTAL HOURS FOR THE PERIOD: 675

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 4/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	1	1	1	3	6	0	0	0	0	0	12
NNE	0	0	0	1	0	8	3	0	0	0	0	0	12
NE	0	0	0	1	0	1	8	0	0	0	0	0	10
ENE	0	0	0	1	1	3	11	3	0	0	0	0	19
E	0	0	0	2	9	4	3	0	0	0	0	0	18
ESE	0	0	1	7	6	5	29	1	0	0	0	0	49
SE	0	2	0	5	2	11	10	0	0	0	0	0	30
SSE	0	0	0	3	3	6	0	0	0	0	0	0	12
S	0	1	0	2	4	5	0	0	0	0	0	0	12
SSW	0	0	1	2	5	11	1	0	0	0	0	0	20
SW	0	1	0	2	2	6	0	0	0	0	0	0	11
WSW	0	0	0	2	1	1	0	0	0	0	0	0	4
W	0	0	0	1	1	6	0	0	0	0	0	0	8
WNW	0	0	1	0	0	2	1	0	0	0	0	0	4
NW	0	0	1	0	0	1	1	0	0	0	0	0	3
NNW	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL	0	4	5	30	35	74	73	4	0	0	0	0	225

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 225
TOTAL HOURS FOR THE PERIOD: 225

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 1/ 1/91 0:00 TO 6/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	1	1	0	0	1	1	0	0	0	0	0	4
NNE	0	1	1	0	4	6	2	0	0	0	0	0	14
NE	0	0	1	1	2	3	2	0	0	0	0	0	9
ENE	0	0	0	2	1	3	2	0	0	0	0	0	8
E	0	0	0	0	0	4	1	0	0	0	0	0	5
ESE	0	0	0	1	0	1	6	0	0	0	0	0	8
SE	0	0	1	3	0	3	1	0	0	0	0	0	8
SSE	0	0	1	1	4	2	2	0	0	0	0	0	10
S	0	1	0	0	3	3	0	0	0	0	0	0	7
SSW	0	0	0	2	3	8	0	0	0	0	0	0	13
SW	0	0	0	3	3	1	1	0	0	0	0	0	8
WSW	0	0	0	0	2	2	0	0	0	0	0	0	4
W	0	0	1	0	1	2	0	0	0	0	0	0	4
WNW	0	0	0	1	0	3	0	0	0	0	0	0	4
NW	0	0	0	0	0	1	0	0	0	0	0	0	1
NNW	0	0	0	1	1	1	2	0	0	0	0	0	5
TOTAL	0	3	6	15	24	44	20	0	0	0	0	0	112

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 113
TOTAL HOURS FOR THE PERIOD: 113

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	16	11	13	51	20	20	4	0	0	0	0	0	135
NNE	11	22	21	34	41	35	4	0	1	0	0	0	169
NE	15	17	32	36	15	8	0	0	0	0	0	0	123
ENE	9	16	14	32	11	10	0	0	0	0	0	0	92
E	10	15	28	26	10	7	0	0	0	0	0	0	96
ESE	9	17	24	30	10	5	0	0	0	0	0	0	95
SE	2	16	16	29	31	21	0	0	0	0	0	0	115
SSE	3	8	7	16	18	25	4	0	0	0	0	0	81
S	2	5	7	16	10	20	4	0	0	0	0	2	66
SSW	3	6	9	32	16	27	4	0	0	0	0	0	97
SW	4	10	11	25	23	9	2	0	0	0	0	0	84
WSW	9	12	14	25	31	18	3	0	0	0	0	0	112
W	14	18	17	20	35	35	0	0	0	0	0	0	139
WNW	13	21	20	40	26	28	1	0	0	0	0	0	149
NW	19	32	23	25	16	27	3	0	0	0	0	0	145
NNW	22	18	7	36	32	34	7	0	1	0	0	0	157
TOTAL	161	244	263	473	345	329	36	0	2	0	0	2	1855

NUMBER OF CALMS: 14
NUMBER OF INVALID HOURS: 339
NUMBER OF VALID HOURS: 1869
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 7/ 1/91 0100 TO 9/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	1	0	3	4	8	2	0	0	0	0	0	18
NNE	0	1	1	3	11	17	3	0	0	0	0	0	36
NE	1	0	0	6	10	8	0	0	0	0	0	0	25
ENE	0	0	1	7	8	8	0	0	0	0	0	0	24
E	0	0	1	8	3	7	0	0	0	0	0	0	19
ESE	0	0	1	7	9	4	0	0	0	0	0	0	21
SE	0	0	0	4	15	20	0	0	0	0	0	0	39
SSE	0	0	0	3	11	20	3	0	0	0	0	0	37
S	0	0	0	2	4	14	2	0	0	0	0	0	22
SSW	0	0	0	3	6	15	1	0	0	0	0	0	25
SW	0	0	0	2	3	8	1	0	0	0	0	0	14
WSW	0	0	1	3	16	15	2	0	0	0	0	0	37
W	1	0	0	5	17	28	0	0	0	0	0	0	51
WNW	0	0	0	9	11	22	0	0	0	0	0	0	42
NW	0	0	0	1	4	21	2	0	0	0	0	0	28
NNW	0	0	0	1	5	13	6	0	0	0	0	0	25
TOTAL	2	2	5	67	137	228	22	0	0	0	0	0	463

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 463
TOTAL HOURS FOR THE PERIOD: 463

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 7/ 1/91 0100 TO 9/30/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	3	3	2	1	0	0	0	0	0	9
NNE	0	0	0	2	3	0	0	0	0	0	0	0	5
NE	0	0	0	2	0	0	0	0	0	0	0	0	2
ENE	0	0	0	1	0	1	0	0	0	0	0	0	2
E	0	0	1	0	0	0	0	0	0	0	0	0	1
ESE	0	0	0	1	0	0	0	0	0	0	0	0	1
SE	0	0	1	1	1	0	0	0	0	0	0	0	3
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	5	0	1	0	0	0	0	0	0	6
SSW	0	0	0	2	1	5	0	0	0	0	0	0	8
SW	0	0	0	1	3	0	0	0	0	0	0	0	4
WSW	0	0	0	1	3	1	0	0	0	0	0	0	5
W	0	0	0	3	6	3	0	0	0	0	0	0	12
WNW	0	0	0	3	5	3	0	0	0	0	0	0	11
NW	0	0	0	0	4	4	0	0	0	0	0	0	8
NNW	0	0	0	2	4	8	1	0	0	0	0	0	15
TOTAL	0	0	2	27	33	28	2	0	0	0	0	0	92

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 92
TOTAL HOURS FOR THE PERIOD: 92

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	1	0	1	0	0	0	0	0	0	2
NNE	0	0	1	1	1	1	0	0	0	0	0	0	4
NE	0	0	0	2	0	0	0	0	0	0	0	0	2
ENE	0	0	0	1	0	0	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	2	0	0	0	0	0	0	0	0	0	2
SE	0	0	0	0	1	0	0	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	2	1	3	0	0	0	0	0	0	6
SW	0	1	0	0	2	0	0	0	0	0	0	0	3
WSW	0	0	0	2	0	0	0	0	0	0	0	0	2
W	0	0	0	0	2	0	0	0	0	0	0	0	2
WNW	0	0	0	0	1	1	0	0	0	0	0	0	2
NW	0	0	0	1	1	0	0	0	0	0	0	0	2
NNW	0	0	0	1	3	3	0	0	0	0	0	0	7
TOTAL	0	1	3	11	12	9	0	0	0	0	0	0	36

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 36
TOTAL HOURS FOR THE PERIOD: 36

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	4	13	7	7	1	0	0	0	0	0	32
NNE	0	2	0	2	4	10	1	0	0	0	0	0	19
NE	0	1	3	2	2	0	0	0	0	0	0	0	8
ENE	0	0	1	2	1	0	0	0	0	0	0	0	4
E	0	2	2	3	3	0	0	0	0	0	0	0	10
ESE	0	1	2	8	0	0	0	0	0	0	0	0	11
SE	0	0	2	4	2	1	0	0	0	0	0	0	9
SSE	0	1	2	5	2	3	1	0	0	0	0	0	14
S	0	2	1	2	3	3	1	0	0	0	0	0	12
SSW	0	1	0	4	4	3	3	0	0	0	0	0	15
SW	0	0	2	5	8	1	0	0	0	0	0	0	16
WSW	0	0	3	7	9	1	0	0	0	0	0	0	20
W	0	1	0	6	10	1	0	0	0	0	0	0	18
WNW	0	1	6	9	6	1	1	0	0	0	0	0	24
NW	0	1	3	7	5	1	1	0	0	0	0	0	18
NNW	0	0	0	12	14	9	0	0	0	0	0	0	35
TOTAL	0	13	31	91	80	41	9	0	0	0	0	0	265

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 265
TOTAL HOURS FOR THE PERIOD: 265

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	1	4	13	5	1	0	0	0	0	0	0	24
NNE	1	6	9	8	15	6	0	0	0	0	0	0	45
NE	2	4	13	9	2	0	0	0	0	0	0	0	30
ENE	2	6	7	14	2	1	0	0	0	0	0	0	32
E	4	8	17	12	4	0	0	0	0	0	0	0	45
ESE	4	5	15	14	1	1	0	0	0	0	0	0	40
SE	1	6	5	16	12	0	0	0	0	0	0	0	40
SSE	1	1	4	7	5	2	0	0	0	0	0	0	20
S	1	2	2	3	2	2	1	0	0	0	0	0	13
SSW	1	0	7	15	4	1	0	0	0	0	0	0	28
SW	0	3	4	15	7	0	1	0	0	0	0	0	30
WSW	0	5	9	12	3	1	0	0	0	0	0	0	30
W	2	5	11	5	0	3	0	0	0	0	0	0	26
WNW	1	6	7	15	3	1	0	0	0	0	0	0	33
NW	0	8	8	12	1	1	0	0	0	0	0	0	30
NNW	3	3	3	6	2	1	0	0	1	0	0	0	19
TOTAL	23	69	125	176	68	21	2	0	1	0	0	0	485

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 486
TOTAL HOURS FOR THE PERIOD: 486

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	4	3	1	8	1	0	0	0	0	0	0	0	17
NNE	3	8	5	11	7	0	0	0	1	0	0	0	35
NE	6	4	7	9	1	0	0	0	0	0	0	0	27
ENE	2	7	5	4	0	0	0	0	0	0	0	0	18
E	5	4	7	3	0	0	0	0	0	0	0	0	19
ESE	5	10	4	0	0	0	0	0	0	0	0	0	19
SE	1	10	7	3	0	0	0	0	0	0	0	0	21
SSE	1	5	1	1	0	0	0	0	0	0	0	0	8
S	1	0	4	4	1	0	0	0	0	0	0	2	12
SSW	2	4	1	6	0	0	0	0	0	0	0	0	13
SW	1	6	4	2	0	0	0	0	0	0	0	0	13
WSW	5	5	1	0	0	0	1	0	0	0	0	0	12
W	4	9	5	1	0	0	0	0	0	0	0	0	19
WNW	2	8	6	3	0	0	0	0	0	0	0	0	19
NW	5	16	5	4	1	0	0	0	0	0	0	0	31
NNW	8	6	1	8	4	0	0	0	0	0	0	0	27
TOTAL	55	105	64	67	15	0	1	0	1	0	0	2	310

NUMBER OF CALMS: 7
NUMBER OF INVALID HOURS: 5
NUMBER OF VALID HOURS: 317
TOTAL HOURS FOR THE PERIOD: 322

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	12	6	4	10	0	1	0	0	0	0	0	0	33
NNE	7	5	5	7	0	1	0	0	0	0	0	0	25
NE	6	8	9	6	0	0	0	0	0	0	0	0	29
ENE	5	3	0	3	0	0	0	0	0	0	0	0	11
E	1	1	0	0	0	0	0	0	0	0	0	0	2
ESE	0	1	0	0	0	0	0	0	0	0	0	0	1
SE	0	0	1	1	0	0	0	0	0	0	0	0	2
SSE	1	1	0	0	0	0	0	0	0	0	0	0	2
S	0	1	0	0	0	0	0	0	0	0	0	0	1
SSW	0	1	1	0	0	0	0	0	0	0	0	0	2
SW	3	0	1	0	0	0	0	0	0	0	0	0	4
WSW	4	2	0	0	0	0	0	0	0	0	0	0	6
W	7	3	1	0	0	0	0	0	0	0	0	0	11
WNW	10	6	1	1	0	0	0	0	0	0	0	0	18
NW	14	7	7	0	0	0	0	0	0	0	0	0	28
NNW	11	9	3	6	0	0	0	0	0	0	0	0	29
TOTAL	81	54	33	34	0	2	0	0	0	0	0	0	204

NUMBER OF CALMS: 6
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 210
TOTAL HOURS FOR THE PERIOD: 210

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	2	3	8	20	28	28	0	0	0	0	0	89
NNE	0	2	2	9	28	38	72	0	0	1	0	0	152
NE	1	2	5	13	15	33	61	1	0	0	0	0	131
ENE	2	1	2	14	15	48	74	1	0	0	0	0	157
E	0	0	7	18	29	24	36	2	0	0	0	0	116
ESE	0	0	5	7	21	51	43	7	0	0	0	0	134
SE	0	1	1	7	16	41	42	0	0	0	0	0	108
SSE	0	2	1	10	8	34	16	1	0	0	0	0	72
S	0	2	5	7	16	30	16	1	0	0	0	2	79
SSW	0	0	3	7	22	44	22	1	0	0	0	0	99
SW	0	2	0	12	18	42	10	2	0	0	0	0	86
WSW	1	1	1	13	26	54	17	1	0	0	0	0	114
W	0	1	3	8	36	94	31	2	0	0	0	0	175
WNW	0	2	7	9	25	59	23	0	0	0	0	0	125
NW	0	1	4	11	17	35	27	0	0	0	0	0	95
NNW	0	0	0	14	20	58	42	3	0	0	0	0	137
TOTAL	4	19	49	167	332	713	560	22	0	1	0	2	1869

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 339
NUMBER OF VALID HOURS: 1869
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	0	0	2	1	3	0	0	0	0	0	7
NNE	0	0	1	0	4	9	18	0	0	0	0	0	32
NE	0	1	0	2	4	8	17	0	0	0	0	0	32
ENE	0	0	0	2	2	7	14	1	0	0	0	0	26
E	0	0	1	3	7	3	16	1	0	0	0	0	31
ESE	0	0	0	0	3	12	18	4	0	0	0	0	37
SE	0	0	0	1	3	12	15	0	0	0	0	0	31
SSE	0	0	0	0	1	14	11	1	0	0	0	0	27
S	0	0	0	1	1	9	7	0	0	0	0	0	18
SSW	0	0	0	3	2	6	5	0	0	0	0	0	16
SW	0	0	0	0	1	8	7	0	0	0	0	0	16
WSW	0	0	0	2	4	18	10	0	0	0	0	0	34
W	0	0	0	0	6	42	21	0	0	0	0	0	69
WNW	0	0	0	0	3	22	10	0	0	0	0	0	35
NW	0	0	0	0	1	9	16	0	0	0	0	0	26
NNW	0	0	0	1	2	7	13	3	0	0	0	0	26
TOTAL	0	2	2	15	46	187	201	10	0	0	0	0	463

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 463
TOTAL HOURS FOR THE PERIOD: 463

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	1	3	2	0	0	0	0	0	6
NNE	0	0	0	0	2	5	1	0	0	0	0	0	8
NE	0	0	0	0	0	3	0	0	0	0	0	0	3
ENE	0	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	1	0	0	0	1	0	0	0	0	0	2
ESE	0	0	0	0	0	0	1	0	0	0	0	0	1
SE	0	0	0	1	1	0	1	0	0	0	0	0	3
SSE	0	0	0	0	0	1	0	0	0	0	0	0	1
S	0	0	0	1	3	1	0	0	0	0	0	0	5
SSW	0	0	0	0	2	2	4	0	0	0	0	0	8
SW	0	0	0	0	0	2	0	0	0	0	0	0	2
WSW	0	0	0	0	1	2	1	0	0	0	0	0	4
W	0	0	0	1	4	10	0	0	0	0	0	0	15
WNW	0	0	0	0	1	9	0	0	0	0	0	0	10
NW	0	0	0	0	1	4	4	0	0	0	0	0	9
NNW	0	0	0	1	3	5	5	0	0	0	0	0	14
TOTAL	0	0	1	4	19	48	20	0	0	0	0	0	92

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 92
TOTAL HOURS FOR THE PERIOD: 92

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	1	0	0	0	0	0	0	0	1
NNE	0	0	0	1	0	2	1	0	0	0	0	0	4
NE	0	0	0	0	0	1	1	0	0	0	0	0	2
ENE	0	0	0	0	0	0	1	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	0	0	0	0	0	0	1
SE	0	0	0	1	0	0	1	0	0	0	0	0	2
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	5	0	0	0	0	0	0	5
SW	0	0	0	0	0	3	0	0	0	0	0	0	3
WSW	0	0	0	1	1	0	0	0	0	0	0	0	2
W	0	0	0	1	1	1	0	0	0	0	0	0	3
WNW	0	0	1	0	0	2	0	0	0	0	0	0	3
NW	0	0	0	0	1	1	0	0	0	0	0	0	2
NNW	0	0	0	0	0	7	0	0	0	0	0	0	7
TOTAL	0	0	2	4	4	22	4	0	0	0	0	0	36

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 36
TOTAL HOURS FOR THE PERIOD: 36

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	2	1	6	12	4	0	0	0	0	0	25
NNE	0	0	0	0	5	0	12	0	0	1	0	0	18
NE	0	0	1	2	0	6	3	0	0	0	0	0	12
ENE	0	0	0	2	1	2	5	0	0	0	0	0	10
E	0	0	1	3	2	1	8	0	0	0	0	0	15
ESE	0	0	1	2	1	2	2	0	0	0	0	0	8
SE	0	0	0	0	0	3	4	0	0	0	0	0	7
SSE	0	1	1	3	1	3	2	0	0	0	0	0	11
S	0	0	1	0	4	6	2	0	0	0	0	0	13
SSW	0	0	0	1	3	7	6	1	0	0	0	0	18
SW	0	0	0	2	4	3	1	1	0	0	0	0	11
WSW	0	0	1	3	5	4	3	0	0	0	0	0	16
W	0	0	0	2	10	12	2	1	0	0	0	0	27
WNW	0	0	2	4	7	5	2	0	0	0	0	0	20
NW	0	0	4	5	6	3	2	0	0	0	0	0	20
NNW	0	0	0	6	6	16	6	0	0	0	0	0	34
TOTAL	0	1	14	36	61	85	64	3	0	1	0	0	265

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 265
TOTAL HOURS FOR THE PERIOD: 265

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	4	6	7	3	0	0	0	0	0	20
NNE	0	1	1	6	7	4	17	0	0	0	0	0	36
NE	0	0	2	6	2	7	12	1	0	0	0	0	30
ENE	0	1	0	7	11	25	16	0	0	0	0	0	60
E	0	0	3	6	14	11	10	1	0	0	0	0	45
ESE	0	0	1	2	9	24	14	3	0	0	0	0	53
SE	0	1	0	4	10	12	13	0	0	0	0	0	40
SSE	0	1	0	2	0	7	3	0	0	0	0	0	13
S	0	1	3	3	2	5	4	1	0	0	0	0	19
SSW	0	0	0	2	5	11	6	0	0	0	0	0	24
SW	0	2	0	5	5	15	2	1	0	0	0	0	30
WSW	0	1	0	5	6	14	2	0	0	0	0	0	28
W	0	0	1	3	7	13	8	1	0	0	0	0	33
WNW	0	1	0	1	5	9	7	0	0	0	0	0	23
NW	0	0	0	1	4	9	4	0	0	0	0	0	18
NNW	0	0	0	2	3	4	5	0	0	0	0	0	14
TOTAL	0	9	11	59	96	177	126	8	0	0	0	0	486

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 486
TOTAL HOURS FOR THE PERIOD: 486

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	1	1	0	3	3	9	0	0	0	0	0	17
NNE	0	1	0	1	6	8	7	0	0	0	0	0	23
NE	0	1	1	2	5	5	15	0	0	0	0	0	29
ENE	1	0	2	3	0	7	18	0	0	0	0	0	31
E	0	0	1	3	5	5	1	0	0	0	0	0	15
ESE	0	0	1	3	7	12	6	0	0	0	0	0	29
SE	0	0	1	0	2	11	7	0	0	0	0	0	21
SSE	0	0	0	4	4	9	0	0	0	0	0	0	17
S	0	1	1	1	3	8	3	0	0	0	0	2	19
SSW	0	0	2	1	6	7	1	0	0	0	0	0	17
SW	0	0	0	3	4	9	0	0	0	0	0	0	16
WSW	0	0	0	0	3	11	1	1	0	0	0	0	16
W	0	1	0	0	4	12	0	0	0	0	0	0	17
WNW	0	1	1	3	3	6	4	0	0	0	0	0	18
NW	0	0	0	1	2	5	0	0	0	0	0	0	8
NNW	0	0	0	2	4	10	8	0	0	0	0	0	24
TOTAL	1	6	11	27	61	128	80	1	0	0	0	2	317

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 5
NUMBER OF VALID HOURS: 317
TOTAL HOURS FOR THE PERIOD: 322

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 7/ 1/91 0:00 TO 9/30/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	3	1	2	7	0	0	0	0	0	13
NNE	0	0	0	1	4	10	16	0	0	0	0	0	31
NE	1	0	1	1	4	3	13	0	0	0	0	0	23
ENE	1	0	0	0	1	6	20	0	0	0	0	0	28
E	0	0	0	3	1	4	0	0	0	0	0	0	8
ESE	0	0	1	0	1	1	2	0	0	0	0	0	5
SE	0	0	0	0	0	3	1	0	0	0	0	0	4
SSE	0	0	0	1	2	0	0	0	0	0	0	0	3
S	0	0	0	1	3	1	0	0	0	0	0	0	5
SSW	0	0	1	0	4	6	0	0	0	0	0	0	11
SW	0	0	0	2	4	2	0	0	0	0	0	0	8
WSW	1	0	0	2	6	5	0	0	0	0	0	0	14
W	0	0	2	1	4	4	0	0	0	0	0	0	11
WNW	0	0	3	1	6	6	0	0	0	0	0	0	16
NW	0	1	0	4	2	4	1	0	0	0	0	0	12
NNW	0	0	0	2	2	9	5	0	0	0	0	0	18
TOTAL	3	1	8	22	45	66	65	0	0	0	0	0	210

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 210
TOTAL HOURS FOR THE PERIOD: 210

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	11	7	12	34	20	53	31	0	0	0	0	0	168
NNE	13	14	18	46	38	43	29	0	0	0	0	0	201
NE	18	13	21	53	30	29	2	0	0	0	0	0	166
ENE	33	40	28	23	30	34	4	0	0	0	0	0	192
E	24	24	20	31	10	20	1	0	0	0	0	0	130
ESE	17	16	21	45	31	26	3	0	0	0	0	0	159
SE	6	8	14	89	108	110	20	0	0	0	0	0	355
SSE	2	3	2	14	25	72	77	11	0	0	0	0	206
S	2	3	4	6	15	33	45	7	0	0	0	0	115
SSW	2	2	1	2	7	18	5	1	0	0	0	0	38
SW	0	2	12	3	4	3	0	0	0	0	0	0	24
WSW	4	6	5	3	6	5	0	1	0	0	0	0	30
W	2	4	4	5	10	6	3	0	0	0	0	0	34
WNW	8	13	6	14	6	12	5	0	0	0	0	0	64
NW	10	21	12	26	20	26	27	0	0	0	0	0	142
NNW	12	6	10	27	31	32	29	3	0	0	0	0	150
TOTAL	164	182	190	421	391	522	281	23	0	0	0	0	2174

NUMBER OF CALMS: 12
NUMBER OF INVALID HOURS: 22
NUMBER OF VALID HOURS: 2186
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	3	0	12	7	0	0	0	0	0	22
NNE	0	0	1	0	9	17	16	0	0	0	0	0	43
NE	0	0	0	7	14	14	2	0	0	0	0	0	37
ENE	0	0	2	5	18	23	1	0	0	0	0	0	49
E	0	0	4	11	10	5	0	0	0	0	0	0	30
ESE	0	0	0	12	7	14	3	0	0	0	0	0	36
SE	0	0	1	5	31	42	15	0	0	0	0	0	94
SSE	0	0	0	1	11	31	23	2	0	0	0	0	68
S	0	0	0	1	7	15	16	1	0	0	0	0	40
SSW	0	0	0	1	0	7	0	0	0	0	0	0	8
SW	0	0	0	0	2	1	0	0	0	0	0	0	3
WSW	0	0	0	0	1	4	0	0	0	0	0	0	5
W	0	0	0	2	6	4	2	0	0	0	0	0	14
WNW	0	0	0	0	1	3	0	0	0	0	0	0	4
NW	0	0	1	0	2	4	8	0	0	0	0	0	15
NNW	0	0	0	0	0	2	10	2	0	0	0	0	14
TOTAL	0	0	9	48	119	198	103	5	0	0	0	0	482

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 482
TOTAL HOURS FOR THE PERIOD: 482

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	0	2	2	0	0	0	0	0	4
NNE	0	0	0	0	2	2	1	0	0	0	0	0	5
NE	0	0	1	0	0	0	0	0	0	0	0	0	1
ENE	0	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	1	0	1	0	0	0	0	0	0	2
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	1	0	2	4	1	0	0	0	0	0	8
SSE	0	0	0	2	0	1	5	2	0	0	0	0	10
S	0	0	0	1	1	2	3	0	0	0	0	0	7
SSW	0	0	0	0	1	2	2	0	0	0	0	0	5
SW	0	0	0	0	2	0	0	0	0	0	0	0	2
WSW	0	0	0	0	2	0	0	0	0	0	0	0	2
W	0	0	0	0	0	2	0	0	0	0	0	0	2
WNW	0	0	0	0	0	2	0	0	0	0	0	0	2
NW	0	0	0	0	0	6	2	0	0	0	0	0	8
NNW	0	0	0	1	0	2	7	1	0	0	0	0	11
TOTAL	0	0	2	5	10	27	23	3	0	0	0	0	70

NUMBER OF CALMS: 0
NUMBER OF INVALID HOUR 0
NUMBER OF VALID HOURS: 70
TOTAL HOURS FOR THE PERIOD: 70

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 10/ 1/91 0100 TO 12/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	1	0	2	0	0	0	0	0	3
NNE	0	0	0	1	0	0	1	0	0	0	0	0	2
NE	0	0	0	1	0	1	0	0	0	0	0	0	2
ENE	0	0	0	1	2	1	0	0	0	0	0	0	4
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	1	0	0	0	0	0	1
SSE	0	0	0	1	0	0	2	0	0	0	0	0	3
S	0	0	0	0	0	0	3	0	0	0	0	0	3
SSW	0	0	0	0	0	2	0	0	0	0	0	0	2
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	1	1	0	0	0	0	0	0	0	2
W	0	0	0	0	1	0	0	0	0	0	0	0	1
WNW	0	0	0	0	1	0	2	0	0	0	0	0	3
NW	0	0	0	0	0	0	2	0	0	0	0	0	2
NNW	0	0	0	0	0	4	0	0	0	0	0	0	4
TOTAL	0	0	0	5	6	8	13	0	0	0	0	0	32

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 32
TOTAL HOURS FOR THE PERIOD: 32

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 10/ 1/91 0100 TO 12/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	2	6	10	23	20	0	0	0	0	0	61
NNE	0	0	1	3	8	7	9	0	0	0	0	0	28
NE	0	0	0	3	4	6	0	0	0	0	0	0	13
ENE	0	0	0	3	2	6	3	0	0	0	0	0	14
E	0	0	0	1	0	1	1	0	0	0	0	0	3
ESE	0	0	1	6	8	1	0	0	0	0	0	0	16
SE	0	0	0	7	10	13	3	0	0	0	0	0	33
SSE	0	1	0	0	4	12	30	7	0	0	0	0	54
S	0	0	0	1	2	8	20	6	0	0	0	0	37
SSW	0	0	0	0	4	1	3	1	0	0	0	0	9
SW	0	0	0	1	0	2	0	0	0	0	0	0	3
WSW	0	1	3	2	2	1	0	1	0	0	0	0	10
W	0	0	1	2	3	0	1	0	0	0	0	0	7
WNW	0	2	1	3	4	7	3	0	0	0	0	0	20
NW	0	1	2	11	11	11	14	0	0	0	0	0	50
NNW	0	0	2	8	11	11	8	0	0	0	0	0	40
TOTAL	0	5	13	57	83	110	115	15	0	0	0	0	398

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 398
TOTAL HOURS FOR THE PERIOD: 398

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 10/ 1/91 0100 TO 12/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0		.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	0	11	5	16	0	0	0	0	0	0		33
NNE	0	0	0	6	12	17	2	0	0	0	0	0		37
NE	0	0	0	18	9	8	0	0	0	0	0	0		35
ENE	0	0	2	3	4	3	0	0	0	0	0	0		12
E	0	1	5	12	0	13	0	0	0	0	0	0		31
ESE	1	3	4	18	15	11	0	0	0	0	0	0		52
SE	0	2	5	49	50	48	0	0	0	0	0	0		154
SSE	0	0	0	4	6	28	16	0	0	0	0	0		54
S	0	1	2	1	2	8	3	0	0	0	0	0		17
SSW	0	0	0	1	1	5	0	0	0	0	0	0		7
SW	0	1	6	1	0	0	0	0	0	0	0	0		8
WSW	1	0	1	0	0	0	0	0	0	0	0	0		2
W	1	1	1	1	0	0	0	0	0	0	0	0		4
WNW	1	2	3	5	0	0	0	0	0	0	0	0		11
NW	1	3	1	7	6	5	1	0	0	0	0	0		24
NNW	0	0	0	6	14	13	4	0	0	0	0	0		37
TOTAL	5	15	30	143	124	175	26	0	0	0	0	0		518

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 518
TOTAL HOURS FOR THE PERIOD: 518

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 10/ 1/91 0100 TO 12/31/91 2310O

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	0	9	4	0	0	0	0	0	0	0	14
NNE	0	1	8	14	7	0	0	0	0	0	0	0	30
NE	1	0	7	18	3	0	0	0	0	0	0	0	29
ENE	0	2	2	3	4	0	0	0	0	0	0	0	11
E	3	4	1	3	0	0	0	0	0	0	0	0	11
ESE	1	3	8	8	1	0	0	0	0	0	0	0	21
SE	1	1	3	20	14	3	0	0	0	0	0	0	42
SSE	0	1	1	4	3	0	1	0	0	0	0	0	10
S	0	1	1	2	3	0	0	0	0	0	0	0	7
SSW	0	0	1	0	1	1	0	0	0	0	0	0	3
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	1	2	1	0	0	0	0	0	0	0	0	0	4
W	0	0	2	0	0	0	0	0	0	0	0	0	2
WNW	2	0	1	4	0	0	0	0	0	0	0	0	7
NW	0	3	2	2	1	0	0	0	0	0	0	0	8
NNW	0	2	6	8	5	0	0	0	0	0	0	0	21
TOTAL	9	21	44	95	46	4	1	0	0	0	0	0	220

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 220
TOTAL HOURS FOR THE PERIOD: 220

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 10/ 1/91 0100 TO 12/31/91 2300

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	11	5	10	5	0	0	0	0	0	0	0	0	31
NNE	13	13	8	22	0	0	0	0	0	0	0	0	56
NE	17	13	13	6	0	0	0	0	0	0	0	0	49
ENE	33	38	22	8	0	0	0	0	0	0	0	0	101
E	21	19	10	3	0	0	0	0	0	0	0	0	53
ESE	15	10	8	1	0	0	0	0	0	0	0	0	34
SE	5	5	4	8	1	0	0	0	0	0	0	0	23
SSE	2	1	1	2	1	0	0	0	0	0	0	0	7
S	2	1	1	0	0	0	0	0	0	0	0	0	4
SSW	2	2	0	0	0	0	0	0	0	0	0	0	4
SW	0	1	6	1	0	0	0	0	0	0	0	0	8
WSW	2	3	0	0	0	0	0	0	0	0	0	0	5
W	1	3	0	0	0	0	0	0	0	0	0	0	4
WNW	5	9	1	2	0	0	0	0	0	0	0	0	17
NW	9	14	6	6	0	0	0	0	0	0	0	0	35
NNW	12	4	2	4	1	0	0	0	0	0	0	0	23
TOTAL	150	141	92	68	3	0	0	0	0	0	0	0	454

NUMBER OF CALMS: 12
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 466
TOTAL HOURS FOR THE PERIOD: 466

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	2	1	2	11	35	99	17	0	0	0	0	167
NNE	0	1	0	3	15	73	74	10	0	0	0	0	176
NE	0	0	0	2	6	38	146	13	1	0	0	0	206
ENE	1	1	1	6	8	47	91	11	0	0	0	0	166
E	0	0	1	15	14	50	34	14	0	0	0	0	128
ESE	1	0	1	5	21	35	194	60	5	0	0	0	322
SE	1	0	0	6	5	46	195	43	4	0	0	0	300
SSE	0	0	1	3	7	31	69	37	4	0	0	0	152
S	0	0	1	4	7	40	57	27	3	0	0	0	139
SSW	0	0	1	6	3	22	18	3	0	0	0	0	53
SW	0	0	0	5	3	4	1	0	0	0	0	0	13
WSW	0	1	0	5	6	17	8	0	1	0	0	0	38
W	0	0	2	4	5	22	8	1	0	0	0	0	42
WNW	0	0	1	5	9	14	17	9	0	0	0	0	55
NW	0	0	3	3	7	34	50	13	1	0	0	0	111
NNW	0	0	0	2	9	31	55	20	0	0	0	0	117
TOTAL	3	5	13	76	136	539	1116	278	19	0	0	0	2185

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 22
NUMBER OF VALID HOURS: 2186
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.23- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	1	1	13	3	0	0	0	0	18
NNE	0	0	0	2	1	12	16	1	0	0	0	0	32
NE	0	0	0	0	4	20	9	7	1	0	0	0	41
ENE	0	0	0	1	4	22	25	3	0	0	0	0	55
E	0	0	0	6	6	10	17	2	0	0	0	0	41
ESE	0	0	0	2	10	14	34	10	4	0	0	0	74
SE	0	0	0	2	2	19	41	13	2	0	0	0	79
SSE	0	0	0	0	1	14	14	11	0	0	0	0	40
S	0	0	0	1	3	11	14	9	0	0	0	0	38
SSW	0	0	0	0	0	6	2	0	0	0	0	0	8
SW	0	0	0	0	0	4	0	0	0	0	0	0	4
WSW	0	0	0	0	0	2	0	0	0	0	0	0	2
W	0	0	0	0	1	13	3	0	0	0	0	0	17
WNW	0	0	0	0	0	2	2	1	0	0	0	0	5
NW	0	0	0	1	0	3	5	7	1	0	0	0	17
NNW	0	0	0	0	0	2	3	6	0	0	0	0	11
TOTAL	0	0	0	15	33	155	198	73	8	0	0	0	482

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 482
TOTAL HOURS FOR THE PERIOD: 482

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	1	0	3	2	0	0	0	0	6
NNE	0	0	0	0	1	1	2	0	0	0	0	0	4
NE	0	0	0	0	0	0	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	2	0	0	0	0	0	2
E	0	0	0	0	0	1	0	1	0	0	0	0	2
ESE	0	0	0	0	0	0	1	0	0	0	0	0	1
SE	0	0	0	1	0	1	5	3	0	0	0	0	10
SSE	0	0	0	1	0	0	0	3	2	0	0	0	6
S	0	0	0	0	2	2	1	3	0	0	0	0	8
SSW	0	0	0	0	0	2	3	0	0	0	0	0	5
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	1	2	0	0	0	0	0	0	3
W	0	0	0	0	0	2	1	0	0	0	0	0	3
WNW	0	0	0	0	0	1	1	0	0	0	0	0	2
NW	0	0	0	0	0	1	6	1	0	0	0	0	8
NNW	0	0	0	0	0	1	1	7	0	0	0	0	9
TOTAL	0	0	0	2	5	14	27	20	2	0	0	0	70

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 70
TOTAL HOURS FOR THE PERIOD: 70

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 10/ 1/91 0100 TO 12/31/91 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	0	1	0	1	0	0	0	0	2
NNE	0	0	0	0	1	0	1	1	0	0	0	0	3
NE	0	0	0	1	0	1	1	0	0	0	0	0	3
ENE	0	0	0	0	0	0	3	0	0	0	0	0	3
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	1	0	0	0	0	1
SSE	0	0	0	0	1	0	0	2	0	0	0	0	3
S	0	0	0	0	0	0	2	1	0	0	0	0	3
SSW	0	0	0	0	0	2	0	0	0	0	0	0	2
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	2	0	0	0	0	0	0	0	2
W	0	0	0	0	0	1	0	0	0	0	0	0	1
WNW	0	0	0	0	1	0	0	2	0	0	0	0	3
NW	0	0	0	0	0	0	1	1	0	0	0	0	2
NNW	0	0	0	0	0	0	4	0	0	0	0	0	4
TOTAL	0	0	0	1	5	5	12	9	0	0	0	0	32

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 32
TOTAL HOURS FOR THE PERIOD: 32

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	5	9	29	10	0	0	0	0	53
NNE	0	0	0	0	5	10	11	6	0	0	0	0	32
NE	0	0	0	1	1	0	9	2	0	0	0	0	13
ENE	0	1	1	1	0	3	6	6	0	0	0	0	18
E	0	0	0	2	1	0	1	2	0	0	0	0	6
ESE	0	0	0	0	0	3	22	7	0	0	0	0	32
SE	0	0	0	0	0	2	18	7	2	0	0	0	29
SSE	0	0	0	0	1	0	18	17	2	0	0	0	38
S	0	0	0	0	0	3	20	12	3	0	0	0	38
SSW	0	0	0	1	1	3	5	3	0	0	0	0	13
SW	0	0	0	1	1	0	1	0	0	0	0	0	3
WSW	0	0	0	1	1	0	3	0	1	0	0	0	6
W	0	0	1	2	2	1	2	1	0	0	0	0	9
WNW	0	0	0	2	2	6	11	6	0	0	0	0	27
NW	0	0	2	0	4	16	16	3	0	0	0	0	41
NNW	0	0	0	2	6	18	10	4	0	0	0	0	40
TOTAL	0	1	4	13	30	74	182	86	8	0	0	0	398

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 398
TOTAL HOURS FOR THE PERIOD: 398

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	1	0	1	0	7	24	1	0	0	0	0	34
NNE	0	0	0	0	2	8	22	2	0	0	0	0	34
NE	0	0	0	0	0	7	35	1	0	0	0	0	43
ENE	0	0	0	1	0	2	9	2	0	0	0	0	14
E	0	0	0	3	1	11	5	9	0	0	0	0	29
ESE	0	0	0	0	0	9	79	37	1	0	0	0	126
SE	1	0	0	1	0	4	73	18	0	0	0	0	97
SSE	0	0	0	1	1	1	27	4	0	0	0	0	34
S	0	0	0	0	0	5	15	2	0	0	0	0	22
SSW	0	0	0	2	0	1	6	0	0	0	0	0	9
SW	0	0	0	2	1	0	0	0	0	0	0	0	3
WSW	0	0	0	1	1	4	0	0	0	0	0	0	6
W	0	0	0	0	2	3	0	0	0	0	0	0	5
WNW	0	0	1	3	3	2	1	0	0	0	0	0	10
NW	0	0	0	0	1	8	11	1	0	0	0	0	21
NNW	0	0	0	0	0	4	24	3	0	0	0	0	31
TOTAL	1	1	1	15	12	76	331	80	1	0	0	0	518

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 518
TOTAL HOURS FOR THE PERIOD: 518

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 10/ 1/91 0:00 TO 12/31/91 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	0	0	1	7	17	0	0	0	0	0	25
NNE	0	0	0	0	0	16	7	0	0	0	0	0	23
NE	0	0	0	0	0	3	30	1	0	0	0	0	34
ENE	0	0	0	0	1	5	14	0	0	0	0	0	20
E	0	0	0	1	0	3	4	0	0	0	0	0	8
ESE	0	0	1	0	1	0	33	6	0	0	0	0	41
SE	0	0	0	0	0	4	23	1	0	0	0	0	28
SSE	0	0	0	0	1	2	4	0	0	0	0	0	7
S	0	0	0	1	0	2	3	0	0	0	0	0	6
SSW	0	0	0	0	0	3	2	0	0	0	0	0	5
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	3	0	0	0	0	0	0	3
W	0	0	0	0	0	1	0	0	0	0	0	0	1
WNW	0	0	0	0	1	0	1	0	0	0	0	0	2
NW	0	0	0	1	1	1	5	0	0	0	0	0	8
NNW	0	0	0	0	0	2	6	0	0	0	0	0	8
TOTAL	0	0	1	3	6	52	149	8	0	0	0	0	219

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 220
TOTAL HOURS FOR THE PERIOD: 220

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 10/ 1/91 0100 TO 12/31/91 2300

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	22-.30	.31-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	1	1	1	3	10	13	0	0	0	0	0	29
NNE	0	1	0	1	5	26	15	0	0	0	0	0	48
NE	0	0	0	0	1	7	61	2	0	0	0	0	71
ENE	1	0	0	3	3	15	32	0	0	0	0	0	54
E	0	0	1	3	6	25	7	0	0	0	0	0	42
ESE	1	0	0	3	10	9	25	0	0	0	0	0	48
SE	0	0	0	2	3	16	35	0	0	0	0	0	56
SSE	0	0	1	1	2	14	6	0	0	0	0	0	24
S	0	0	1	2	2	17	2	0	0	0	0	0	24
SSW	0	0	1	3	2	5	0	0	0	0	0	0	11
SW	0	0	0	2	1	0	0	0	0	0	0	0	3
WSW	0	1	0	3	1	6	5	0	0	0	0	0	16
W	0	0	1	2	0	1	2	0	0	0	0	0	6
WNW	0	0	0	0	2	3	1	0	0	0	0	0	6
NW	0	0	1	1	1	5	6	0	0	0	0	0	14
NNW	0	0	0	0	3	4	7	0	0	0	0	0	14
TOTAL	2	3	7	27	45	163	217	2	0	0	0	0	466

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 466
TOTAL HOURS FOR THE PERIOD: 466