

2005 ANNUAL EFFLUENT RELEASE REPORT

PREPARED BY: W. Spell, Jr. 1136
William H. Spell, Jr. / Senior Environmental Specialist

REVIEWED BY: M. Davis For M. Boyle 3261
Michael J. Boyle / Radiation Protection Manager

APPROVED BY: Donald W. Vinci
Donald W. Vinci / General Manager Plant Operations

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ATTACHMENT 1 – OFFSITE DOSE CALCULATION MANUAL (ODCM)

I. INTRODUCTION

This is the annual Radioactive Effluent Release Report for the period of January 1, 2005, through December 31, 2005. This report is submitted in accordance with Technical Specification 5.6.3 of Appendix A to River Bend Station (RBS) License Number NPF-47.

II. SUPPLEMENTAL INFORMATION

A. Regulatory Limits

1. 10CFR50, Appendix I Limits

a. Fission and Activation Gases

In accordance with Technical Requirement (TR) 3.11.2.2, the air dose due to noble gases released in gaseous effluent to areas at and beyond the SITE BOUNDARY shall be limited to:

$$\begin{aligned}
 D_{\text{Gamma-Air}} &= \text{gamma air dose from radioactive noble gases in millirad (mrad)} \\
 &= 3.17\text{E-}8 \sum_{i=1}^n M_i \overline{(X/Q)} Q_i \leq 5 \text{ mrad/qtr} \\
 &\leq 10 \text{ mrad/yr}
 \end{aligned}$$

$$\begin{aligned}
 D_{\text{Beta-Air}} &= \text{beta air dose from radioactive noble gases in millirad (mrad)} \\
 &= 3.17\text{E-}8 \sum_{i=1}^n N_i \overline{(X/Q)} Q_i \leq 10 \text{ mrad/qtr} \\
 &\leq 20 \text{ mrad/yr}
 \end{aligned}$$

b. Radioiodines (I-131 & I-133) and Particulate

In accordance with Technical Requirement 3.11.2.3, the dose to a MEMBER OF THE PUBLIC from radioiodines (I-131 and I-133), tritium (H-3) and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluent releases to areas at and beyond the SITE BOUNDARY shall be limited to:

$D_{I\&8DP\tau}$ = Dose in mrem to the organ (τ) for the age group of interest from radioiodine (I-131, I-133, tritium, and 8 day particulate via the pathway of interest.)

$$= 3.17\text{E-}08 (F_o) \sum_{I=1}^n P_{i\tau} \overline{(X/Q)} Q_i \quad \text{and}$$

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

$$D_{\tau} = \sum_{z=1}^n D_{I\&8DP\tau} \leq 7.5 \text{ mrem/qtr}$$

$$\leq 15 \text{ mrem/yr}$$

(above terms defined in the RBS ODCM)

c. Liquid Effluent

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

$$D_{it} = \frac{A_{it} \Delta t Q_i}{(DF) D_w}$$

and

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

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

and

$$D_{TOTAL} \quad \text{Total Body} \quad \leq 1.5 \text{ mrem/qtr}$$

$$\leq 3 \text{ mrem/yr}$$

$$D_{TOTAL} \quad \text{Any Organ} \quad \leq 5 \text{ mrem/qtr}$$

$$\leq 10 \text{ mrem/yr}$$

(above terms defined in RBS ODCM)

2. 40CFR190 Limits

In accordance with Technical Requirement 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:

$$\leq 25 \text{ mrem to the total body or any organ (except the thyroid)}$$

$$\leq 75 \text{ mrem to the thyroid}$$

3. Miscellaneous Limits

a. Technical Requirement 3.11.2.1 - Fission and Activation Gases

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

$$\begin{aligned}
 DR_{TB} &= \text{Dose rate to the total body in mrem/yr} \\
 &= \sum_{i=1}^n K_i \overline{(X/Q)} \dot{Q}_i \leq 500 \text{ mrem/yr and}
 \end{aligned}$$

$$\begin{aligned}
 DR_{SKIN} &= \text{Dose rate to the skin in mrem/yr} \\
 &= \sum_{i=1}^n L_i + 1.1M_i \overline{(X/Q)} \dot{Q}_i \leq 3000 \text{ mrem/yr}
 \end{aligned}$$

(above terms defined in RBS ODCM)

b. Technical Requirement 3.11.2.1 - Radioiodine (I-131 & I-133) and Particulate

In accordance with Technical Requirement 3.11.2.1, the dose rate due to radioiodines, 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 mrem/yr to any organ:

$DR_{I\&8DP\tau}$ = Dose rate to the organ τ for the age pathway group of interest from Radioiodines (I-131 & I-133), tritium, and 8 day particulate via the inhalation pathway in mrem/yr.

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

(above terms defined in RBS ODCM)

c. Technical Requirement 3.11.1.1 - Liquid Effluent

In accordance with Technical Requirement 3.11.1.1, the concentration of radioactive material released in liquid effluent to UNRESTRICTED AREAS shall be limited to ten times the concentrations specified in 10CFR20, Appendix B, Table 2, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2.0E-04 microcuries/milliliter total concentration.

d. **Technical Requirement 3.11.2.5 - Ventilation Exhaust Treatment System**

In accordance with Technical Requirement 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 and beyond the SITE BOUNDARY would exceed 0.3 mrem to any organ in a 31-day period.

e. **Technical Requirement 3.11.1.3 - Liquid Radwaste Treatment System**

In accordance with Technical Requirement 3.11.1.3, the liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid waste 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. Effluent Concentration Limits

1. **Gaseous Releases**

The concentrations of radioactive gaseous releases are based on the dose rate restrictions in RBS Technical Requirements, rather than the Effluent Concentration Limits (ECL) listed in 10CFR20 Appendix B, Table 2, Column 1.

2. **Liquid Releases**

The Effluent Concentration Limits of radioactive materials in liquid effluent is limited to ten times 10CFR20, Appendix B, Table 2, Column 2.

C. Measurements and Approximations of Total Radioactivity

1. **Gaseous Effluent**

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 using high purity germanium detectors coupled to computerized pulse height analyzers. The sampling and analysis frequencies are described in Table 1F.

Sampling and analysis of these effluent streams provide noble gas radionuclide relative abundance that 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 the stack grab sample and a significant increase in hourly averages was recorded, the nuclide relative abundance of the last sample (or the last similar event), which indicated the presence of activity, was used 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. Particulate and Radioiodine (I-131 & I-133)

Particulates, Iodine-131 and Iodine-133 are continuously sampled from the three release points using a particulate filter and charcoal cartridge in line with a sample 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 using high purity germanium detectors coupled to computerized pulse height analyzers. Given the nuclide specific activity concentrations, process flow rate, and duration of the sample; 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. Strontium-89 and Strontium-90 (Sr-89 and Sr-90) are quantitatively analyzed by counting by Scintillation techniques (Chrenkov counting). 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 using an ice bath condensation collection method. The collected sample is then analyzed using 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 Effluent

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 using a high resolution germanium detector coupled to a computerized pulse height analyzer. Tritium concentration is determined using a liquid scintillation counter. Strontium-89 and Strontium-90 are quantitatively analyzed by Scintillation techniques (Chrenkov counting). Iron-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.

D. Batch Releases

Liquid Effluents

Batch releases and receiving stream flow from River Bend Station during the reporting period of January 1, 2005, through December 31, 2005 are shown in Table 2D.

The Mississippi River stream flow is obtained by averaging data from the U. S. Army Corp of Engineers website using flow gauge data at Tarbert Landing.

Gaseous Effluents

There were no batch releases of gaseous effluents from River Bend Station during the reporting period of January 1, 2005, through December 31, 2005.

E. Abnormal Releases

There were no abnormal liquid or gaseous releases during the reporting period of January 1, 2005, through December 31, 2005.

F. Estimate of Total Error

1. Liquid

The maximum error associated with sample collection, laboratory analysis, and discharge volume is 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:

Noble Gases	: ± 37.0%
Iodines	: ± 18.6%
Particulate	: ± 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:

$$E_T = \sqrt{((E_1)^2 + (E_2)^2 + \dots(E_n)^2)}$$

where:

E_T = total error

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

III. GASEOUS EFFLUENT SUMMARY INFORMATION

Refer to the Table 1 series 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 indicates that the concentration of the particular radionuclide was below the Lower Limit of Detection (LLD) as listed in Table 1F. Also, any nuclide not appearing in the tables was < LLD for all four quarters.

IV. LIQUID EFFLUENT SUMMARY INFORMATION

Refer to the Table 2 series 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 indicates that the concentration of the particular radionuclide was below the Lower Limit of Detection (LLD) as listed in Table 2D. Also, any nuclide not appearing in the tables was < LLD for all four quarters.

V. SOLID WASTE

Refer to Table 3, for "Solid Waste and Irradiated Fuel Shipments."

VI. RADIOLOGICAL IMPACT ON MAN (40CFR190)

An assessment was made of radiation doses to the likely most-exposed member of the public from River Bend and other nearby uranium fuel cycle sources (none within five miles). 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 less than or equal to 25 mrem to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem.

Total Body	=	7.53E-02 mrem
Skin	=	4.26E-02 mrem
Thyroid	=	2.04E-01 mrem
Other Organ	=	7.50E-02 mrem

In addition, an assessment of doses was made for members of the public due to their activities inside the site boundary. Parameters and assumptions used to make this determination can be found in Table 4. The results of the calculations can be found in Table 5. The maximally exposed member of the public was the lawn service provider, which was conservatively calculated to have performed all work at the Generation Support Building during 2005. 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 6 and 7 for the cumulative joint frequency distributions and annual average data for continuous releases. The meteorological recovery for 2005 was 94.1%.

VIII. RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION OPERABILITY

The minimum number of channels required to be OPERABLE as described in Table 3.3.11.2-1 of Technical Requirement 3.3.11.2 were, if inoperable at any time in the period January 1, 2005, through December 31, 2005, 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 3.3.11.3-1 of Technical Requirement 3.3.11.3 were, if inoperable at any time in the period January 1, 2005, through December 31, 2005, restored to operable status within the required time. Reporting of inoperable channels is therefore not required in this report.

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 January 1, 2005, through December 31, 2005 was less than or equal to the 10 curie limit as required by Technical Specification 5.5.8.b.

XI. RADIOLOGICAL ENVIRONMENTAL MONITORING

There were two editorial changes during the reporting period January 1, 2005, through December 31, 2005. Table 4.1 of the ODCM, Direct Radiation, TQS1 and TEC changed street names:

- Table 4.1, Direct Radiation, TQS1 – editorial - Change street name from Ferdinand to Commerce. (Comment PAR RSP-0008R12CM-1)
- Table 4.1, Direct Radiation, TEC – editorial - Change street name from Midway to Greenbriar (Comment PAR RSP-0008R12CM-1 – the comment PAR had Brieffield as the new street, which was incorrect. The street should be Greenbriar)

XII. LAND USE CENSUS

There was no Land Use Census, as required by Technical Requirement 3.12.2, performed in 2005. The next Land Use Census will be performed in 2006.

XIII. OFFSITE DOSE CALCULATION MANUAL (ODCM)

The changes to the ODCM are summarized below. Attachment 1 contains the ODCM along with change bars in the margin except where deletions of data occurred.

- Added new references 2.14 & 2.15. Step 4.1 – changed the title to match the current company title
- Steps 4.1, 4.5, 4.6 and 4.7 have been reworded to reflect the current responsibilities
- Step 5.3 changed to the latest RP department title
- Step 7.2.2.1 typo - changed the explanation concerning F_L being less than 1.0 to read “As long as F_L is less than 1.0, the concentration of the tank is within compliance with TLCO 3.11.1.1 limits. It did say “ F_L is less than 10,.....”.
- Step 7.3.3, added a step to describe what to do if there is no gamma activity in a liquid batch release and modified Attachment 2 to show the isotopes used for the default gamma factor.

- Step 8.2, second paragraph – deleted “When a nuclide concentration is below the LLD for the analysis, it is not reported as being present in the sample.” There is no change to sampling methodology, analysis or reporting criteria by deleting this paragraph.
- Table 4.1, Direct Radiation, TQS1 – editorial - Change street name from Ferdinand to Commerce. (Comment PAR RSP-0008R12CM-1)
- Table 4.1, Direct Radiation, TEC – editorial - Change street name from Midway to Greenbriar (Comment PAR RSP-0008R12CM-1 – the comment PAR had Brieffield as the new street, which was incorrect. The street should be Greenbriar)
- Section 1.2 – editorial - Changed the 2nd sentence to infer that alternate calculation methods will be more accurate rather than more limiting.
- Table I-5, Ag-110m - Incorrect dose factors were found for an isotope that has not been seen at RBS nor likely to be seen in the gaseous effluents.
- Table C-1 (Attachment 4) – editorial - added column for Li+1.1Mi to aid in calculations.
- Attachment 9 added reference for recalculating chi/q and d/q
- The Reference section was renumbered to match plant numbering criteria.
- The underlines in the table of contents were removed.
- Formula 8.3.2.2-2 – Corrected typographical in Li + 1.1Mi definition from Attachment 3 to Attachment 4.

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

Engineering has performed a review of the IDEAS database to evaluate design changes completed or partially completed during 2005 involving the subject systems. These design changes were then reviewed to determine if there have been any major changes to the subject systems. The review was based on a major change being defined as a modification which affected the method of processing or the effluent from the system. Also, to be a “major change” the change must have affected the USAR.

The Engineering Requests completed during this time period primarily consisted of administrative changes. These administrative changes primarily consisted of drawing/document corrections and addition of vendor documents into the site document system to facilitate maintenance. These changes did not modify any radioactive waste system major component such that the processing method or effluent was changed. These changes also had no affect on the method of processing solid, liquid or gaseous waste and did not affect the isotopic composition or the quantity of liquid, solid, or gaseous waste as described in the USAR.

In conclusion, no design changes were completed during the specified time period that constituted a major change to liquid, solid or gaseous radwaste treatment systems.

XV. PROCESS CONTROL PROGRAM (PCP)

There were no changes to the PCP implemented in 2005 (Nuclear Management Manual/ENS/RW-105, Process Control Program).

EFFLUENT AND WASTE DISPOSAL REPORT
TABLE 1A
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
1. Total Release	Ci	2.92E+00	9.09E+01	1.08E+01	2.68E+01	1.31E+02
2. Avg. Release Rate	uCi/sec	3.76E-01	1.16E+01	1.36E+00	3.37E+00	
3. % Applicable Limit	% (1)	1.78E-02	2.53E-01	2.98E-02	2.05E-01	2.53E-01
		4.16E+01				
Iodine-131						
1. Total Release	Ci	1.17E-04	1.28E-04	1.11E-04	3.13E-03	3.49E-03
2. Avg. Release Rate	uCi/sec	1.50E-05	1.63E-05	1.40E-05	3.94E-04	
3. % Applicable Limit	%	4.95E-02	5.45E-02	4.75E-02	1.35E+00	7.48E-01
Particulates Half Life >= 8 days						
1. Total Release	Ci	3.33E-05	1.30E-05	3.01E-05	8.04E-04	8.80E-04
2. Avg. Release Rate	uCi/sec	4.28E-06	1.66E-06	3.79E-06	1.01E-04	
3. % Applicable Limit	%	8.26E-03	8.14E-03	1.12E-02	2.09E-01	1.21E-01
Tritium						
1. Total Release	Ci	5.27E+00	9.71E+00	8.44E+00	7.74E+00	3.11E+01
2. Avg. Release Rate	uCi/sec	6.77E-01	1.23E+01	1.06E+00	9.73E-01	
3. % Applicable Limit	%	6.77E+00	1.23E+01	1.06E+01	9.73E+00	3.38E-01

1. Either the gamma air dose limit of 5 mrad/qtr or beta air dose limit of 10 mrad/qtr (T.R. 3.11.2.2.a), which ever is most limiting.
2. The % of applicable limit is determined by comparing the dose contribution to the critical organ limits of TRM 3.11.2.3

EFFLUENT AND WASTE DISPOSAL REPORT
TABLE 1B
GASEOUS EFFLUENTS - GROUND RELEASES - CONTINUOUS MODE

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
XE-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133M	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135	Ci	2.71E-02	6.53E-03	7.64E-02	3.76E-01	4.86E-01
XE-135M	Ci	3.71E-02	8.93E-03	1.04E-01	4.74E-01	6.25E-01
Totals for Period...	Ci	6.42E-02	1.55E-02	1.81E-01	8.50E-01	1.11E+00
Iodines						
I-131	Ci	0.00E+00	0.00E+00	0.00E+00	1.52E-05	1.52E-05
I-133	Ci	0.00E+00	0.00E+00	0.00E+00	6.78E-05	6.78E-05
Totals for Period...	Ci	0.00E+00	0.00E+00	0.00E+00	8.31E-05	8.31E-05
Particulates Half Life >= 8 days						
CE-141	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-57	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-58	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-60	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CR-51	Ci	1.78E-05	0.00E+00	0.00E+00	0.00E+00	1.78E-05
CS-137	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FE-59	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MN-54	Ci	1.16E-06	1.92E-06	0.00E+00	0.00E+00	3.08E-06
NB-95	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZN-65	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period...	Ci	1.90E-05	1.92E-06	0.00E+00	0.00E+00	2.09E-05
Tritium						
H-3	Ci	2.34E+00	2.16E+00	1.88E+00	1.95E+00	8.33E+00
Totals for Period...	Ci	2.34E+00	2.16E+00	1.88E+00	1.95E+00	8.33E+00

EFFLUENT AND WASTE DISPOSAL REPORT
 TABLE 1C
 GASEOUS EFFLUENTS - GROUND RELEASES - BATCH MODE

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR

Fission and Activation Gases						
XE-133	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Totals for Period...	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Iodines						
** No Nuclide Activities **						

Particulates Half Life >= 8 days						
CO-60	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MN-54	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ZN-65	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Totals for Period...	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tritium						
** No Nuclide Activities **						

EFFLUENT AND WASTE DISPOSAL REPORT
TABLE 1D
GASEOUS EFFLUENTS - MIXED MODE RELEASES - CONTINUOUS MODE

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
AR-41	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	Ci	0.00E+00	0.00E+00	4.22E-02	2.26E-01	2.68E-01
KR-87	Ci	0.00E+00	0.00E+00	8.36E-02	0.00E+00	8.36E-02
KR-88	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-131M	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133	Ci	1.47E-01	4.81E+01	8.17E+00	0.00E+00	5.64E+01
XE-133M	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135	Ci	2.04E+00	2.81E+01	2.30E+00	1.28E+01	4.53E+01
XE-135M	Ci	6.65E-01	1.46E+01	0.00E+00	1.29E+01	2.82E+01
XE-137	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period...	Ci	2.86E+00	9.09E+01	1.06E+01	2.59E+01	1.30E+02
Iodines						
I-131	Ci	1.17E-04	1.28E-04	1.11E-04	3.12E-03	3.47E-03
I-132	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	Ci	7.05E-04	7.04E-04	9.58E-04	1.75E-02	1.99E-02
I-135	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period...	Ci	8.21E-04	8.32E-04	1.07E-03	2.06E-02	2.33E-02
Particulates Half Life >= 8 days						
BA-140	Ci	0.00E+00	0.00E+00	0.00E+00	3.48E-04	3.48E-04
CE-139	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-58	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CO-60	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CR-51	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-134	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-137	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FE-59	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MN-54	Ci	0.00E+00	1.11E-05	4.92E-06	0.00E+00	1.60E-05
SR-89	Ci	1.43E-05	0.00E+00	2.52E-05	4.53E-04	4.93E-04
SR-90	Ci	0.00E+00	0.00E+00	0.00E+00	2.90E-06	2.90E-06
ZN-65	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period...	Ci	1.43E-05	1.11E-05	3.01E-05	8.04E-04	8.59E-04
Tritium						
H-3	Ci	2.93E+00	7.54E+00	6.56E+00	5.79E+00	2.28E+01

EFFLUENT AND WASTE DISPOSAL REPORT
 SUPPLEMENTAL INFORMATION
 GASEOUS EFFLUENTS - BATCH MODE
 Table 1E

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Number of releases		0	0	0	0	0
Total release time	minutes	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Maximum release time	minutes	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Average release time	minutes	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Minimum release time	minutes	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TABLE 1F
Effluent and Waste Disposal Annual Report 2005 Year
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 1G
GASEOUS DOSE SUMMARY**

Release ID: 1 All Gas Release Points

Coefficient Type: Historical

=== I&P DOSE LIMIT ANALYSIS =====

Period-Limit	Age Group	Organ	Dose (mrem)	Limit (mrem)	Max % of Limit
Q1 - T.Spec Any Organ	CHILD	THYROID	1.72E-02	7.50E+00	2.30E-01
Q2 - T.Spec Any Organ	CHILD	THYROID	1.85E-02	7.50E+00	2.47E-01
Q3 - T.Spec Any Organ	CHILD	THYROID	1.64E-02	7.50E+00	2.18E-01
Q4 - T.Spec Any Organ	CHILD	THYROID	1.29E-01	7.50E+00	1.72E+00
Yr - T.Spec Any Organ	CHILD	THYROID	1.81E-01	1.50E+01	1.21E+00

=== NOBLE GAS DOSE LIMIT ANALYSIS =====

Period-Limit	Dose (mrad)	Limit (mrad)	% of Limit
Q1 - T.Spec Gamma	8.88E-04	5.00E+00	1.78E-02
Q2 - T.Spec Gamma	1.27E-02	5.00E+00	2.53E-01
Q3 - T.Spec Gamma	1.49E-03	5.00E+00	2.98E-02
Q4 - T.Spec Gamma	1.02E-02	5.00E+00	2.05E-01
Yr - T.Spec Gamma	2.53E-02	1.00E+01	2.53E-01
Q1 - T.Spec Beta	7.21E-04	1.00E+01	7.21E-03
Q2 - T.Spec Beta	1.37E-02	1.00E+01	1.37E-01
Q3 - T.Spec Beta	1.95E-03	1.00E+01	1.95E-02
Q4 - T.Spec Beta	6.05E-03	1.00E+01	6.05E-02
Yr - T.Spec Beta	2.24E-02	2.00E+01	1.12E-01

EFFLUENT AND WASTE DISPOSAL REPORT
TABLE 2A
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
1. Total Release	Ci	0.00E+00	4.72E-02	3.95E-02	1.85E-02	1.05E-01
2. Avg. Diluted Conc.	uCi/ml	0.00E+00	3.40E-08	2.64E-08	1.31E-08	1.87E-08
3. % Applicable Limit	% (1)	0.00E+00	3.31E-02	2.55E-01	7.04E-03	1.65E-01
Tritium						
1. Total Release	Ci	0.00E+00	4.22E+01	5.80E+01	1.68E+01	1.17E+02
2. Avg. Diluted Conc.	uCi/ml	0.00E+00	3.04E-05	3.87E-05	1.19E-05	2.08E-05
3. % Applicable Limit	%	0.00E+00	8.38E-04	1.76E-03	1.49E-04	1.78E-03
Dissolved and Entrained Gases						
1. Total Release	Ci	0.00E+00	2.53E-03	2.07E-03	5.26E-03	9.87E-03
2. Avg. Diluted Conc.	uCi/ml	0.00E+00	1.83E-09	1.38E-09	3.72E-09	1.75E-09
3. % Applicable Limit	% (2)	0.00E+00	9.10E-04	6.90E-04	1.85E-03	8.77E-04
Gross Alpha Radioactivity						
1. Total Release	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Volume of liquid waste	liters	0.00E+00	1.83E+06	3.08E+06	8.40E+05	5.75E+06
Volume of dil. water	liters	1.32E+09	1.39E+09	1.50E+09	1.42E+09	5.62E+09

(1) The most limiting dose compared to the total body and critical organ limits of TRM 3.11.1.2.a.

(2) Technical Requirement 3.11.1.1 limit of 2.00E-04 uCi/ml for dissolved and entrained noble gases in liquid effluent.

EFFLUENT AND WASTE DISPOSAL REPORT
 TABLE 2B
 LIQUID EFFLUENTS - CONTINUOUS MODE

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR

Fission and Activation Products						
** No Nuclide Activities **	
Tritium						
** No Nuclide Activities **	
Dissolved and Entrained Gases						
** No Nuclide Activities **	
Gross Alpha Radioactivity						
** No Nuclide Activities **	

EFFLUENT AND WASTE DISPOSAL REPORT
 TABLE 2C
 LIQUID EFFLUENTS - BATCH MODE

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
CO-58	Ci	0.00E+00	3.80E-05	1.89E-04	5.95E-06	2.33E-04
CO-60	Ci	0.00E+00	2.10E-03	1.15E-02	1.31E-03	1.49E-02
CR-51	Ci	0.00E+00	0.00E+00	2.18E-04	0.00E+00	2.18E-04
FE-55	Ci	0.00E+00	4.27E-02	1.61E-02	1.61E-02	7.50E-02
FE-59	Ci	0.00E+00	0.00E+00	5.07E-04	1.63E-05	5.23E-04
I-131	Ci	0.00E+00	0.00E+00	0.00E+00	9.97E-06	9.97E-06
LA-140	Ci	0.00E+00	0.00E+00	9.63E-06	6.80E-05	7.76E-05
MN-54	Ci	0.00E+00	1.97E-03	1.04E-02	9.41E-04	1.33E-02
MO-99	Ci	0.00E+00	0.00E+00	0.00E+00	3.49E-06	3.49E-06
RU-106	Ci	0.00E+00	4.29E-05	0.00E+00	0.00E+00	4.29E-05
SB-124	Ci	0.00E+00	0.00E+00	2.63E-05	0.00E+00	2.63E-05
SN-113	Ci	0.00E+00	0.00E+00	2.23E-05	0.00E+00	2.23E-05
SR-89	Ci	0.00E+00	2.37E-04	0.00E+00	0.00E+00	2.37E-04
TC-99M	Ci	0.00E+00	0.00E+00	0.00E+00	3.74E-06	3.74E-06
Y-92	Ci	0.00E+00	3.15E-05	0.00E+00	0.00E+00	3.15E-05
ZN-65	Ci	0.00E+00	0.00E+00	5.58E-04	0.00E+00	5.58E-04
Totals for Period...	Ci	0.00E+00	4.72E-02	3.95E-02	1.85E-02	1.05E-01
Tritium						
H-3	Ci	0.00E+00	4.22E+01	5.80E+01	1.68E+01	1.17E+02
Totals for Period...	Ci	0.00E+00	4.22E+01	5.80E+01	1.68E+01	1.17E+02
Dissolved and Entrained Gases						
XE-133	Ci	0.00E+00	2.03E-03	9.40E-04	2.76E-03	5.73E-03
XE-133M	Ci	0.00E+00	0.00E+00	0.00E+00	6.55E-05	6.55E-05
XE-135	Ci	0.00E+00	4.99E-04	1.13E-03	2.44E-03	4.08E-03
Totals for Period...	Ci	0.00E+00	2.53E-03	2.07E-03	5.26E-03	9.87E-03
Gross Alpha Radioactivity						
** No Nuclide Activities **	

EFFLUENT AND WASTE DISPOSAL REPORT
 SUPPLEMENTAL INFORMATION
 LIQUID EFFLUENTS - BATCH MODE
 Table 2D

REPORT FOR 2005	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Number of releases		0	33	55	15	103
Total release time	minutes	0.00E+00	1.20E+04	1.98E+04	5.49E+03	3.73E+04
Maximum release time	minutes	0.00E+00	4.37E+02	4.27E+02	3.87E+02	4.37E+02
Average release time	minutes	0.00E+00	3.64E+02	3.60E+02	3.66E+02	3.62E+02
Minimum release time	minutes	0.00E+00	3.24E+02	2.60E+02	3.51E+02	2.60E+02
		<u>QTR 1</u>	<u>QTR 2</u>	<u>QTR 3</u>	<u>QTR 4</u>	
Average Miss. River stream flow during periods of release of effluent into a flowing stream	ft ³ /sec	8.35E+05	4.86E+05	2.39E+05	2.03E+05	

TABLE 2E
Effluent and Waste Disposal Annual Report 2005 Year
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: <u>except</u> for Ce-144	5.00E-07
				5.00E-06
			I-131	1.00E-06
	P One Batch/M	M	Dissolved and Entrained Gases (Gamma Emitters)	1.00E-05
	P Each Batch	M Composite	H-3	1.00E-05
			Gross Alpha	1.00E-07
	P Each Batch	Q Composite	Sr-89, Sr-90	5.00E-08
			Fe-55	1.00E-06

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

Table 2F
LIQUID DOSE SUMMARY

Report for: 2005
Release ID: 10 All Liquid Release Points

=== SITE DOSE LIMIT ANALYSIS =====					Liquid Receptor	
Period - Limit	Age Group	Organ	Dose (mrem)	Limit (mrem)	Max % of Limit	
Qtr 1 - T.Spec Any Organ			0.00E+00	1.50E+00	0.00E+00	
Qtr 2 - T.Spec Any Organ	ADULT	GILLI	1.67E-03	5.00E+00	3.34E-02	
Qtr 3 - T.Spec Any Organ	ADULT	GILLI	1.28E-02	5.00E+00	2.55E-01	
Qtr 4 - T.Spec Any Organ	ADULT	GILLI	3.54E-04	5.00E+00	7.09E-03	
2005 - T.Spec Any Organ	ADULT	GILLI	8.28E-03	1.00E+01	8.28E-02	
Qtr 1 - T.Spec Total Body	ADULT	TBODY	0.00E+00	1.50E+00	0.00E+00	
Qtr 2 - T.Spec Total Body	ADULT	TBODY	1.52E-04	1.50E+00	1.01E-02	
Qtr 3 - T.Spec Total Body	ADULT	TBODY	9.12E-04	1.50E+00	6.08E-02	
Qtr 4 - T.Spec Total Body	ADULT	TBODY	3.03E-05	1.50E+00	2.02E-03	
2005 - T.Spec Total Body	ADULT	TBODY	6.26E-04	3.00E+00	2.09E-02	

TABLE 3
Effluent and Waste Disposal Annual Report 2005 Year
Solid Waste and Irradiated Fuel Shipments
Reporting Period from 01/01/05 to 12/31/05

A. Solid Waste Shipped for Burial or Disposal (Not Irradiated Fuel)

<u>1. Type of Waste</u>	<u>Units</u>	<u>12 Month Period</u>	<u>Waste Class</u>	<u>Estimated Error %</u>
Spent Resins, Filter Sludges, Evaporator Bottoms, Etc.	m3	1.19E+02	A	See Below
	Ci	3.80E+02	A	
	m3	6.81E+00	B	
	Ci	1.88E+03	B	
	m3	0.00E+00	C	
	Ci	0.00E+00	C	
Dry Compressible Wastes, Contaminated Equipment Etc.	m3	4.08E+02	A	See Below
	Ci	2.16E+01	A	
Irradiated Components, Control Rods, Etc.	m3	0.00E+00	N/A	N/A
	Ci	0.00E+00		
Other (Water, EHC, Waste Oil)	m3	4.12E+01	N/A	See Below
	Ci	7.67E+00		

Note: Volume considered being the total disposal volume of the container.

Radwaste Estimated Error %:

Waste types considered are processed solid waste (i.e. resin, filter media) and non-compactible/compactible dry active waste.

1. Possible Errors

- a. Volume
- b. Representative Sampling
- c. Instrument/Counting
- d. Dose to Curie Calculations

2. Volume Error

Level indication for processed resins 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. Volume error is not applicable to dry active waste.

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 from dry active waste is based upon obtaining a representative sample from the material being packaged. This error is estimated to be +/- 10% for all waste types, which is consistent with industry standards.

**Effluent and Waste Disposal Annual Report 2005 Year
Solid Waste and Irradiated Fuel Shipments
Reporting Period from 01/01/05 to 12/31/05
Table 3 (continued)**

4. Instrument/Counting Error

The error caused by sample geometry, counting time, sample activity and instrument background is estimated to be +/- 10%. The error for radiological survey instrumentation is estimated to be +/- 20%. This error is applicable to all waste types.

5. Dose to Curie Calculations Error

The Dose to Curie method used to calculate activity suffers from analytical accuracy in that certain important parameters are neglected. These parameters are geometry of package, measuring instrument characteristics, build-up, internal attenuation effect, and external media attenuation. An activity correction factor is applied to provide adjustment for these factors. This error is applicable to all waste types.

2. Estimates of Major Nuclides by Waste Stream

Resins, Filters and Evaporator Bottoms, Etc. (Min 1%)			Dry Compressible Wastes, Contaminated Equipment, Etc. (Min 1%)			Other Water, EHC, Waste Oil, Etc. (Min 1%)		
Isotope	% Abundance	Curies	Isotope	% Abundance	Curies	Isotope	% Abundance	Curies
Mn-54	5.828	1.32E+02	Mn-54	6.628	1.43E+00	Mn-54	3.474	2.66E-01
Fe-55	71.790	1.63E+03	Fe-55	83.999	1.81E+01	Fe-55	85.359	6.54E+00
Co-60	15.133	3.43E+02	Co-60	7.980	1.72E+00	Co-60	10.570	8.10E-01
Zn-65	5.084	1.15E+02						

Determined by Measurement & Correlation.
Packaged in Strong, Tight Liners.
No Solidification Agent or Absorbent Used.
No Irradiated Components, Control Rods, Etc. were shipped in 2005.

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
16	Truck	Studsvik Processing Facility - Erwin, TN.
7	Truck	Envirocare of Utah - Clive, UT
7	Truck	Duratek - Oak Ridge, TN.
5	Truck	RACE - Memphis, TN.

B. No Irradiated Components, Control Rods, Etc. were shipped in 2005.

Irradiated Fuel Shipments Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
0	N/A	N/A

TABLE 4
Effluent and Waste Disposal Annual Report 2005 Year
ASSUMPTIONS/PARAMETERS FOR DOSES TO A
MEMBER OF THE PUBLIC INSIDE SITE BOUNDARY

MEMBER OF THE PUBLIC	LOCATION	DISTANCE⁽¹⁾ METERS	SECTOR	DURATION (HR/YEAR)⁽²⁾
People Entering Site Without Consent	Alligator Bayou	2500	SW	4.00E+01
Lawn Service Provider	General Services Building	115	ENE	3.60E+02
National Guard	Activity Center	994	WNW	4.80E+02 ⁽³⁾

- (1) The approximate distances from main plant vent exhaust to location.
- (2) Liquid pathways dose is not considered due to the nature of activities that individuals are engaged in.
- (3) National Guard/State Police are being evaluated, if applicable, for dose while stationed on site as members of the public. The adult age group is the only age group considered in this category.

TABLE 5
DOSES TO MEMBERS OF THE PUBLIC ON SITE
FROM GASEOUS RELEASES 2005

<u>Dose calc based on Durations</u>	<u>Critical Organ Dose Annual (mrem)</u>	<u>Total Body Dose Annual (mrem)</u>	<u>Skin Dose Annual (mrem)</u>	<u>Annual Duration Factor</u>
Alligator Bayou	8.40E-05	1.02E-04	9.68E-05	4.57E-03
Lawn Service Provider	9.62E-02	1.60E-01	1.51E-01	4.11E-02
National Guard	0.00E+00	0.00E+00	0.00E+00	5.48E-02

(1) The National Guard/State Police were not onsite during 2005.

Table 6
Effluent and Waste Disposal Annual Report 2005 Year
Meteorological Data - Joint Frequency Tables

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 1/ 1/05 0:00 TO 3/31/05 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	8	4	17	36	86	63	1	0	0	0	0	222
NNE	4	6	6	26	66	80	13	0	0	0	0	0	201
NE	6	17	5	22	36	72	6	0	0	0	0	0	164
ENE	6	19	21	28	35	31	8	0	0	0	0	0	148
E	12	9	22	17	22	3	0	0	0	0	0	0	85
ESE	3	13	13	25	28	29	0	0	0	0	0	0	111
SE	0	5	10	50	75	74	7	0	0	0	0	0	221
SSE	0	4	2	6	20	30	32	3	0	0	0	0	97
S	1	0	4	12	20	52	29	3	0	0	0	0	121
SSW	0	3	5	13	32	46	26	1	0	0	0	0	126
SW	0	2	9	15	20	20	18	0	0	0	0	0	84
WSW	1	4	10	18	7	26	13	0	0	0	0	0	79
W	3	9	4	11	13	35	4	0	0	0	0	0	79
WNW	6	10	9	13	13	41	31	2	0	0	0	0	125
NW	2	14	1	5	5	36	20	1	0	0	0	0	84
NNW	2	7	4	4	17	59	45	0	0	0	0	0	138
TOTAL	53	130	129	282	445	720	315	11	0	0	0	0	2085

NUMBER OF CALMS: 4
NUMBER OF INVALID HOURS: 71
NUMBER OF VALID HOURS: 2089
TOTAL HOURS FOR THE PERIOD: 2160

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 1/ 1/05 0:00 TO 3/31/05 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	0	7	0	0	0	0	0	7
NNE	0	0	0	0	0	7	7	0	0	0	0	0	14
NE	0	0	0	0	0	10	2	0	0	0	0	0	12
ENE	1	0	1	0	1	3	2	0	0	0	0	0	8
E	0	0	1	0	1	0	0	0	0	0	0	0	2
ESE	0	1	1	0	2	7	0	0	0	0	0	0	11
SE	0	1	0	2	1	8	1	0	0	0	0	0	13
SSE	0	0	0	0	0	1	1	0	0	0	0	0	2
S	0	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	1	0	0	0	0	0	0	0	1
WNW	0	0	0	0	0	1	0	0	0	0	0	0	1
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL	1	2	3	2	6	38	21	0	0	0	0	0	73

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 73
TOTAL HOURS FOR THE PERIOD: 73

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/05 0:00 TO 3/31/05 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	1	0	8	0	0	0	0	0	9
NNE	0	0	0	0	1	5	2	0	0	0	0	0	8
NE	0	0	0	0	1	1	0	0	0	0	0	0	2
ENE	0	0	0	0	1	3	0	0	0	0	0	0	4
E	0	0	0	2	2	1	0	0	0	0	0	0	5
ESE	0	1	4	1	4	2	0	0	0	0	0	0	12
SE	0	0	0	2	2	8	0	0	0	0	0	0	12
SSE	0	0	0	0	1	2	6	0	0	0	0	0	9
S	0	0	0	0	0	0	3	0	0	0	0	0	3
SSW	0	0	0	1	1	1	0	0	0	0	0	0	3
SW	0	0	0	2	0	0	2	0	0	0	0	0	4
WSW	0	0	0	0	0	1	3	0	0	0	0	0	4
W	0	0	0	0	0	1	0	0	0	0	0	0	1
WNW	0	0	0	0	0	0	4	1	0	0	0	0	5
NW	0	0	0	0	1	1	1	1	0	0	0	0	4
NNW	0	0	0	0	0	4	8	0	0	0	0	0	12
TOTAL	0	1	4	8	15	30	37	2	0	0	0	0	97

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 97
TOTAL HOURS FOR THE PERIOD: 97

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/05 0:00 TO 3/31/05 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	2	3	0	0	0	0	0	6
NNE	0	0	0	0	2	5	0	0	0	0	0	0	7
NE	0	0	0	0	3	3	0	0	0	0	0	0	6
ENE	0	0	0	0	1	0	0	0	0	0	0	0	1
E	0	0	0	1	0	0	0	0	0	0	0	0	1
ESE	0	0	0	1	3	0	0	0	0	0	0	0	4
SE	0	0	0	0	1	2	1	0	0	0	0	0	4
SSE	0	0	0	0	0	2	1	0	0	0	0	0	3
S	0	0	0	0	0	2	2	0	0	0	0	0	4
SSW	0	0	0	0	0	0	2	0	0	0	0	0	2
SW	0	0	0	0	0	0	5	0	0	0	0	0	5
WSW	0	0	0	0	0	0	5	0	0	0	0	0	5
W	0	0	0	1	0	1	1	0	0	0	0	0	3
WNW	0	0	1	0	0	2	4	1	0	0	0	0	8
NW	0	0	0	2	0	7	1	0	0	0	0	0	10
NNW	0	0	0	0	0	4	5	0	0	0	0	0	9
TOTAL	0	0	1	6	10	30	30	1	0	0	0	0	78

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 78
TOTAL HOURS FOR THE PERIOD: 78

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/05 0:00 TO 3/31/05 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	7	18	67	42	1	0	0	0	0	135
NNE	0	0	2	7	26	47	4	0	0	0	0	0	86
NE	0	0	0	4	11	30	4	0	0	0	0	0	49
ENE	0	1	0	5	10	13	3	0	0	0	0	0	32
E	1	0	2	7	12	1	0	0	0	0	0	0	23
ESE	0	0	3	10	13	8	0	0	0	0	0	0	34
SE	0	2	2	19	36	37	4	0	0	0	0	0	100
SSE	0	0	1	2	8	17	20	3	0	0	0	0	51
S	0	0	1	2	7	26	21	3	0	0	0	0	60
SSW	0	1	0	3	20	30	22	1	0	0	0	0	77
SW	0	0	0	10	13	19	11	0	0	0	0	0	53
WSW	0	1	2	11	6	25	5	0	0	0	0	0	50
W	0	0	1	5	11	32	3	0	0	0	0	0	52
WNW	0	1	3	6	9	36	23	0	0	0	0	0	78
NW	0	0	0	2	2	19	14	0	0	0	0	0	37
NNW	0	0	0	3	11	47	32	0	0	0	0	0	93
TOTAL	1	6	17	103	213	454	208	8	0	0	0	0	1010

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 1010
TOTAL HOURS FOR THE PERIOD: 1010

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 1/ 1/05 0:00 TO 3/31/05 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	2	0	1	5	17	17	3	0	0	0	0	0	45
NNE	0	1	0	13	36	16	0	0	0	0	0	0	66
NE	0	2	1	14	19	28	0	0	0	0	0	0	64
ENE	0	1	5	14	16	12	3	0	0	0	0	0	51
E	1	1	7	6	7	1	0	0	0	0	0	0	23
ESE	0	3	3	10	6	12	0	0	0	0	0	0	34
SE	0	0	5	24	35	19	1	0	0	0	0	0	84
SSE	0	1	1	3	11	8	4	0	0	0	0	0	28
S	0	0	2	6	13	24	3	0	0	0	0	0	48
SSW	0	2	2	7	11	15	2	0	0	0	0	0	39
SW	0	0	6	1	7	1	0	0	0	0	0	0	15
WSW	0	1	4	6	1	0	0	0	0	0	0	0	12
W	1	1	1	5	1	1	0	0	0	0	0	0	10
WNW	1	0	1	3	4	1	0	0	0	0	0	0	10
NW	0	1	1	0	2	9	3	0	0	0	0	0	16
NNW	1	0	0	1	6	3	0	0	0	0	0	0	11
TOTAL	6	14	40	118	192	167	19	0	0	0	0	0	556

NUMBER OF CALMS: 1
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/ 1/05 0:00 TO 3/31/05 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	3	4	0	0	0	0	0	0	0	0	10
NNE	1	0	1	5	1	0	0	0	0	0	0	0	8
NE	2	2	0	2	2	0	0	0	0	0	0	0	8
ENE	0	2	6	8	5	0	0	0	0	0	0	0	21
E	4	3	9	1	0	0	0	0	0	0	0	0	17
ESE	3	6	2	2	0	0	0	0	0	0	0	0	13
SE	0	2	2	3	0	0	0	0	0	0	0	0	7
SSE	0	1	0	1	0	0	0	0	0	0	0	0	2
S	0	0	0	4	0	0	0	0	0	0	0	0	4
SSW	0	0	3	2	0	0	0	0	0	0	0	0	5
SW	0	0	2	2	0	0	0	0	0	0	0	0	4
WSW	1	2	4	0	0	0	0	0	0	0	0	0	7
W	0	1	1	0	0	0	0	0	0	0	0	0	2
WNW	1	1	2	4	0	1	0	0	0	0	0	0	9
NW	1	4	0	1	0	0	0	0	0	0	0	0	6
NNW	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTAL	15	26	36	39	8	1	0	0	0	0	0	0	125

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 125
 TOTAL HOURS FOR THE PERIOD: 125

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 1/ 1/05 0:00 TO 3/31/05 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	6	0	0	0	0	0	0	0	0	0	0	10
NNE	3	5	3	1	0	0	0	0	0	0	0	0	12
NE	4	13	4	2	0	0	0	0	0	0	0	0	23
ENE	5	15	9	1	1	0	0	0	0	0	0	0	31
E	6	5	3	0	0	0	0	0	0	0	0	0	14
ESE	0	2	0	1	0	0	0	0	0	0	0	0	3
SE	0	0	1	0	0	0	0	0	0	0	0	0	1
SSE	0	2	0	0	0	0	0	0	0	0	0	0	2
S	1	0	1	0	0	0	0	0	0	0	0	0	2
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	2	1	0	0	0	0	0	0	0	0	0	3
WSW	0	0	0	1	0	0	0	0	0	0	0	0	1
W	2	7	1	0	0	0	0	0	0	0	0	0	10
WNW	4	8	2	0	0	0	0	0	0	0	0	0	14
NW	1	9	0	0	0	0	0	0	0	0	0	0	10
NNW	0	7	3	0	0	0	0	0	0	0	0	0	10
TOTAL	30	81	28	6	1	0	0	0	0	0	0	0	146

NUMBER OF CALMS: 3
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 149
 TOTAL HOURS FOR THE PERIOD: 149

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 1/ 1/05 0:00 TO 3/31/05 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	5	39	135	12	2	0	0	0	195
NNE	0	0	1	1	6	45	133	7	0	0	0	0	193
NE	0	0	2	2	5	19	118	22	0	0	0	0	168
ENE	1	0	0	5	7	29	66	31	1	0	0	0	140
E	0	0	1	2	4	24	37	4	0	0	0	0	72
ESE	0	2	0	7	7	28	121	47	1	0	0	0	213
SE	0	0	1	1	7	31	84	11	1	0	0	0	136
SSE	0	0	0	0	7	24	48	23	2	0	0	0	104
S	0	0	0	6	10	19	68	6	2	0	0	0	111
SSW	0	0	0	1	11	42	71	19	0	0	0	0	144
SW	0	0	0	6	7	36	46	11	0	0	0	0	106
WSW	1	0	2	3	5	34	42	3	0	0	0	0	90
W	0	0	0	7	16	30	44	4	0	0	0	0	101
WNW	0	0	0	4	9	23	57	22	4	0	0	0	119
NW	0	0	1	3	2	14	42	5	0	0	0	0	67
NNW	0	0	2	2	3	22	91	10	0	0	0	0	130
TOTAL	2	3	10	51	111	459	1203	237	13	0	0	0	2089

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 71
NUMBER OF VALID HOURS: 2089
TOTAL HOURS FOR THE PERIOD: 2160

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 1/ 1/05 0:00 TO 3/31/05 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	4	3	0	0	0	0	7
NNE	0	0	0	0	0	0	10	3	0	0	0	0	13
NE	0	0	0	0	0	0	9	3	0	0	0	0	12
ENE	1	0	0	0	1	1	4	2	0	0	0	0	9
E	0	0	0	0	1	1	2	0	0	0	0	0	4
ESE	0	1	0	0	2	0	14	0	0	0	0	0	17
SE	0	0	0	0	2	0	2	1	0	0	0	0	5
SSE	0	0	0	0	0	0	1	1	0	0	0	0	2
S	0	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	1	1	0	0	0	0	0	2
WNW	0	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL	1	1	0	0	6	3	49	13	0	0	0	0	73

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 73
TOTAL HOURS FOR THE PERIOD: 73

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/05 0:00 TO 3/31/05 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	7	1	0	0	0	0	9
NNE	0	0	0	0	0	2	4	0	0	0	0	0	6
NE	0	0	0	0	0	0	3	0	0	0	0	0	3
ENE	0	0	0	0	0	2	2	1	0	0	0	0	5
E	0	0	0	0	0	4	1	1	0	0	0	0	6
ESE	0	0	0	0	1	5	11	3	0	0	0	0	20
SE	0	0	0	0	0	0	3	0	0	0	0	0	3
SSE	0	0	0	0	0	1	5	2	0	0	0	0	8
S	0	0	0	0	0	0	2	1	0	0	0	0	3
SSW	0	0	0	0	1	2	1	0	0	0	0	0	4
SW	0	0	0	0	0	1	0	2	0	0	0	0	3
WSW	0	0	0	0	0	1	4	0	0	0	0	0	5
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	1	1	3	2	0	0	0	7
NW	0	0	0	0	0	1	0	2	0	0	0	0	3
NNW	0	0	0	0	0	0	9	3	0	0	0	0	12
TOTAL	0	0	0	0	3	20	53	19	2	0	0	0	97

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 97
 TOTAL HOURS FOR THE PERIOD: 97

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 1/ 1/05 0:00 TO 3/31/05 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	5	0	0	0	0	0	6
NNE	0	0	0	0	0	2	3	0	0	0	0	0	5
NE	0	0	0	0	1	1	3	1	0	0	0	0	6
ENE	0	0	0	0	0	1	2	0	0	0	0	0	3
E	0	0	0	0	1	0	1	0	0	0	0	0	2
ESE	0	0	0	0	0	1	3	0	0	0	0	0	4
SE	0	0	0	0	0	1	1	1	0	0	0	0	3
SSE	0	0	0	0	0	0	2	0	0	0	0	0	2
S	0	0	0	0	0	0	5	0	0	0	0	0	5
SSW	0	0	0	0	0	0	2	0	0	0	0	0	2
SW	0	0	0	0	0	0	2	2	0	0	0	0	4
WSW	0	0	0	0	0	0	4	2	0	0	0	0	6
W	0	0	0	0	0	1	2	0	0	0	0	0	3
WNW	0	0	0	0	0	1	4	0	2	0	0	0	7
NW	0	0	0	0	0	3	6	0	0	0	0	0	9
NNW	0	0	1	0	0	1	9	0	0	0	0	0	11
TOTAL	0	0	1	0	3	12	54	6	2	0	0	0	78

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 78
 TOTAL HOURS FOR THE PERIOD: 78

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/05 0:00 TO 3/31/05 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	2	28	86	7	2	0	0	0	125
NNE	0	0	0	1	6	23	54	4	0	0	0	0	88
NE	0	0	1	1	1	5	36	12	0	0	0	0	56
ENE	0	0	0	1	1	9	20	11	0	0	0	0	42
E	0	0	0	1	2	2	14	1	0	0	0	0	20
ESE	0	1	0	2	2	10	43	20	0	0	0	0	78
SE	0	0	1	0	2	12	33	7	1	0	0	0	56
SSE	0	0	0	0	4	7	20	16	2	0	0	0	49
S	0	0	0	3	2	13	28	5	2	0	0	0	53
SSW	0	0	0	0	4	20	37	18	0	0	0	0	79
SW	0	0	0	4	1	18	22	6	0	0	0	0	51
WSW	0	0	1	3	4	15	29	1	0	0	0	0	53
W	0	0	0	3	11	15	33	4	0	0	0	0	66
WNW	0	0	0	3	4	12	36	17	0	0	0	0	72
NW	0	0	0	1	1	7	23	1	0	0	0	0	33
NNW	0	0	0	1	2	16	63	7	0	0	0	0	89
TOTAL	0	1	3	24	49	212	577	137	7	0	0	0	1010

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 1010
TOTAL HOURS FOR THE PERIOD: 1010

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 1/ 1/05 0:00 TO 3/31/05 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	0	4	33	1	0	0	0	0	39
NNE	0	0	0	0	0	14	56	0	0	0	0	0	70
NE	0	0	0	1	1	3	47	5	0	0	0	0	57
ENE	0	0	0	0	1	9	31	15	1	0	0	0	57
E	0	0	0	1	0	10	10	2	0	0	0	0	23
ESE	0	0	0	2	1	4	38	24	1	0	0	0	70
SE	0	0	0	0	3	6	34	2	0	0	0	0	45
SSE	0	0	0	0	0	7	19	4	0	0	0	0	30
S	0	0	0	1	4	4	32	0	0	0	0	0	41
SSW	0	0	0	1	2	11	26	1	0	0	0	0	41
SW	0	0	0	2	4	4	16	1	0	0	0	0	27
WSW	0	0	0	0	0	8	3	0	0	0	0	0	11
W	0	0	0	1	2	3	2	0	0	0	0	0	8
WNW	0	0	0	0	2	3	8	1	0	0	0	0	14
NW	0	0	1	0	0	1	9	2	0	0	0	0	13
NNW	0	0	1	0	1	2	7	0	0	0	0	0	11
TOTAL	0	1	2	9	21	93	371	58	2	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/ 1/05 0:00 TO 3/31/05 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	0	0	0	0	0	0	2
NNE	0	0	0	0	0	2	4	0	0	0	0	0	6
NE	0	0	0	0	1	4	10	1	0	0	0	0	16
ENE	0	0	0	0	3	3	5	2	0	0	0	0	13
E	0	0	0	0	0	3	8	0	0	0	0	0	11
ESE	0	0	0	2	1	5	10	0	0	0	0	0	18
SE	0	0	0	1	0	4	6	0	0	0	0	0	11
SSE	0	0	0	0	1	6	0	0	0	0	0	0	7
S	0	0	0	1	1	1	0	0	0	0	0	0	3
SSW	0	0	0	0	0	2	5	0	0	0	0	0	7
SW	0	0	0	0	0	6	4	0	0	0	0	0	10
WSW	0	0	1	0	0	5	1	0	0	0	0	0	7
W	0	0	0	1	0	1	2	0	0	0	0	0	4
WNW	0	0	0	0	1	0	3	1	0	0	0	0	5
NW	0	0	0	1	0	0	2	0	0	0	0	0	3
NNW	0	0	0	1	0	0	1	0	0	0	0	0	2
TOTAL	0	0	1	7	8	44	61	4	0	0	0	0	125

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 125
TOTAL HOURS FOR THE PERIOD: 125

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 1/ 1/05 0:00 TO 3/31/05 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	1	5	0	0	0	0	0	0	7
NNE	0	0	1	0	0	2	2	0	0	0	0	0	5
NE	0	0	1	0	1	6	10	0	0	0	0	0	18
ENE	0	0	0	4	1	4	2	0	0	0	0	0	11
E	0	0	1	0	0	4	1	0	0	0	0	0	6
ESE	0	0	0	1	0	3	2	0	0	0	0	0	6
SE	0	0	0	0	0	8	5	0	0	0	0	0	13
SSE	0	0	0	0	2	3	1	0	0	0	0	0	6
S	0	0	0	1	3	1	1	0	0	0	0	0	6
SSW	0	0	0	0	4	7	0	0	0	0	0	0	11
SW	0	0	0	0	2	7	2	0	0	0	0	0	11
WSW	1	0	0	0	1	5	1	0	0	0	0	0	8
W	0	0	0	2	3	9	4	0	0	0	0	0	18
WNW	0	0	0	1	2	6	5	0	0	0	0	0	14
NW	0	0	0	1	1	2	1	0	0	0	0	0	5
NNW	0	0	0	0	0	3	1	0	0	0	0	0	4
TOTAL	1	0	3	11	21	75	38	0	0	0	0	0	149

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 149
TOTAL HOURS FOR THE PERIOD: 149

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 4/ 1/05 0:00 TO 6/30/05 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	25	16	24	72	34	67	12	1	0	0	0	0	251
NNE	23	14	11	74	38	31	1	0	0	0	0	0	192
NE	27	15	8	22	22	15	0	0	0	0	0	0	109
ENE	22	16	11	20	11	2	0	0	0	0	0	0	82
E	11	16	14	14	6	2	0	0	0	0	0	0	63
ESE	4	18	27	27	10	2	0	0	0	0	0	0	88
SE	7	16	20	64	45	58	7	0	0	0	0	0	217
SSE	2	7	14	33	44	54	19	2	0	0	0	0	175
S	1	9	5	22	30	78	27	2	0	0	0	0	174
SSW	1	5	4	15	27	17	21	1	0	0	0	0	91
SW	0	5	6	14	16	4	7	0	0	0	0	0	52
WSW	5	10	9	15	12	24	9	0	0	0	0	0	84
W	1	14	2	21	15	22	0	0	0	0	0	0	75
WNW	3	10	6	23	14	15	6	0	0	0	0	0	77
NW	9	22	9	16	11	15	16	1	0	0	0	0	99
NNW	18	13	11	31	17	31	26	0	0	0	0	0	147
TOTAL	159	206	181	483	352	437	151	7	0	0	0	0	1976

NUMBER OF CALMS: 31
NUMBER OF INVALID HOURS: 177
NUMBER OF VALID HOURS: 2007
TOTAL HOURS FOR THE PERIOD: 2184

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 4/ 1/05 0:00 TO 6/30/05 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	1	1	0	0	0	0	0	2
NNE	0	0	0	1	0	8	1	0	0	0	0	0	10
NE	0	0	0	0	2	8	0	0	0	0	0	0	10
ENE	0	0	0	0	2	1	0	0	0	0	0	0	3
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	1	0	0	0	0	0	0	0	0	1
SE	0	0	0	0	0	2	0	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	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	2	4	20	2	0	0	0	0	0	28

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 28
TOTAL HOURS FOR THE PERIOD: 28

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 4/ 1/05 0:00 TO 6/30/05 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	5	2	1	0	0	0	0	8
NNE	0	0	0	0	2	3	0	0	0	0	0	0	5
NE	0	1	1	3	5	2	0	0	0	0	0	0	12
ENE	0	0	0	0	2	0	0	0	0	0	0	0	2
E	0	1	1	2	0	1	0	0	0	0	0	0	5
ESE	0	0	1	0	1	0	0	0	0	0	0	0	2
SE	0	0	0	0	1	10	3	0	0	0	0	0	14
SSE	0	0	0	0	0	3	2	0	0	0	0	0	5
S	0	0	0	0	0	0	2	2	0	0	0	0	4
SSW	0	0	0	0	0	0	2	1	0	0	0	0	3
SW	0	0	0	1	0	0	0	0	0	0	0	0	1
WSW	0	0	1	0	1	1	1	0	0	0	0	0	4
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1
NW	0	0	0	0	0	0	5	1	0	0	0	0	6
NNW	0	0	0	0	0	1	6	0	0	0	0	0	7
TOTAL	0	2	4	6	12	26	24	5	0	0	0	0	79

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 79
 TOTAL HOURS FOR THE PERIOD: 79

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 4/ 1/05 0:00 TO 6/30/05 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	1	0	0	0	0	0	3
NNE	0	0	0	3	3	3	0	0	0	0	0	0	9
NE	0	0	0	0	2	2	0	0	0	0	0	0	4
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	1	4	1	0	0	0	0	0	0	6
SE	0	0	0	0	7	8	2	0	0	0	0	0	17
SSE	0	0	0	0	1	4	4	0	0	0	0	0	9
S	0	0	0	0	0	1	4	0	0	0	0	0	5
SSW	0	0	0	0	0	1	3	0	0	0	0	0	4
SW	0	0	0	0	1	0	1	0	0	0	0	0	2
WSW	0	0	0	1	2	2	2	0	0	0	0	0	7
W	0	0	0	0	0	1	0	0	0	0	0	0	1
WNW	0	0	0	0	0	1	1	0	0	0	0	0	2
NW	0	1	0	0	0	3	1	0	0	0	0	0	5
NNW	0	0	0	0	1	2	3	0	0	0	0	0	6
TOTAL	0	1	0	5	21	31	22	0	0	0	0	0	80

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 80
 TOTAL HOURS FOR THE PERIOD: 80

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 4/ 1/05 0:00 TO 6/30/05 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	4	3	17	23	52	8	0	0	0	0	0	107
NNE	0	0	1	16	16	11	0	0	0	0	0	0	44
NE	0	1	1	6	7	3	0	0	0	0	0	0	18
ENE	1	0	3	9	7	1	0	0	0	0	0	0	21
E	0	1	2	9	5	1	0	0	0	0	0	0	18
ESE	0	0	5	14	4	0	0	0	0	0	0	0	23
SE	0	2	3	26	24	29	2	0	0	0	0	0	86
SSE	0	0	0	4	23	37	9	2	0	0	0	0	75
S	0	0	0	2	7	58	21	0	0	0	0	0	88
SSW	0	0	0	4	9	15	16	0	0	0	0	0	44
SW	0	0	0	4	8	4	6	0	0	0	0	0	22
WSW	0	0	1	6	5	18	4	0	0	0	0	0	34
W	0	0	1	15	15	21	0	0	0	0	0	0	52
WNW	0	0	0	8	6	13	4	0	0	0	0	0	31
NW	0	0	0	8	9	12	8	0	0	0	0	0	37
NNW	0	0	0	9	9	24	15	0	0	0	0	0	57
TOTAL	1	8	20	157	177	299	93	2	0	0	0	0	757

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 757
TOTAL HOURS FOR THE PERIOD: 757

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 4/ 1/05 0:00 TO 6/30/05 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	3	1	5	20	8	7	0	0	0	0	0	0	44
NNE	2	4	6	34	15	6	0	0	0	0	0	0	67
NE	0	3	5	11	5	0	0	0	0	0	0	0	24
ENE	0	4	4	8	0	0	0	0	0	0	0	0	16
E	3	5	7	3	1	0	0	0	0	0	0	0	19
ESE	0	7	13	11	1	0	0	0	0	0	0	0	32
SE	3	4	6	27	13	9	0	0	0	0	0	0	62
SSE	0	2	7	23	19	10	4	0	0	0	0	0	65
S	0	2	3	13	19	19	0	0	0	0	0	0	56
SSW	0	1	1	9	18	1	0	0	0	0	0	0	30
SW	0	3	3	8	7	0	0	0	0	0	0	0	21
WSW	0	2	5	7	4	3	0	0	0	0	0	0	21
W	0	5	0	6	0	0	0	0	0	0	0	0	11
WNW	0	3	3	12	8	1	0	0	0	0	0	0	27
NW	0	1	3	6	1	0	2	0	0	0	0	0	13
NNW	1	1	3	8	4	4	2	0	0	0	0	0	23
TOTAL	12	48	74	206	123	60	8	0	0	0	0	0	531

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 532
TOTAL HOURS FOR THE PERIOD: 532

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 4/ 1/05 0:00 TO 6/30/05 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	7	10	23	2	0	0	0	0	0	0	0	46
NNE	6	5	4	18	2	0	0	0	0	0	0	0	35
NE	7	3	1	2	1	0	0	0	0	0	0	0	14
ENE	9	5	2	3	0	0	0	0	0	0	0	0	19
E	5	8	2	0	0	0	0	0	0	0	0	0	15
ESE	3	10	8	0	0	0	0	0	0	0	0	0	21
SE	2	9	11	11	0	0	0	0	0	0	0	0	33
SSE	1	3	5	4	1	0	0	0	0	0	0	0	14
S	1	4	2	6	4	0	0	0	0	0	0	0	17
SSW	1	2	1	2	0	0	0	0	0	0	0	0	6
SW	0	2	3	1	0	0	0	0	0	0	0	0	6
WSW	2	3	1	1	0	0	1	0	0	0	0	0	8
W	0	7	0	0	0	0	0	0	0	0	0	0	7
WNW	1	2	3	3	0	0	0	0	0	0	0	0	9
NW	3	9	4	2	1	0	0	0	0	0	0	0	19
NNW	7	5	4	7	1	0	0	0	0	0	0	0	24
TOTAL	52	84	61	83	12	0	1	0	0	0	0	0	293

NUMBER OF CALMS: 9
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 302
TOTAL HOURS FOR THE PERIOD: 302

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 4/ 1/05 0:00 TO 6/30/05 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	18	4	6	12	1	0	0	0	0	0	0	0	41
NNE	15	5	0	2	0	0	0	0	0	0	0	0	22
NE	20	7	0	0	0	0	0	0	0	0	0	0	27
ENE	12	7	2	0	0	0	0	0	0	0	0	0	21
E	3	1	2	0	0	0	0	0	0	0	0	0	6
ESE	1	1	0	0	0	1	0	0	0	0	0	0	3
SE	2	1	0	0	0	0	0	0	0	0	0	0	3
SSE	1	2	2	2	0	0	0	0	0	0	0	0	7
S	0	3	0	1	0	0	0	0	0	0	0	0	4
SSW	0	2	2	0	0	0	0	0	0	0	0	0	4
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	3	5	1	0	0	0	1	0	0	0	0	0	10
W	1	2	1	0	0	0	0	0	0	0	0	0	4
WNW	2	5	0	0	0	0	0	0	0	0	0	0	7
NW	6	11	2	0	0	0	0	0	0	0	0	0	19
NNW	10	7	4	7	2	0	0	0	0	0	0	0	30
TOTAL	94	63	22	24	3	1	1	0	0	0	0	0	208

NUMBER OF CALMS: 21
NUMBER OF INVALID HOURS: 2
NUMBER OF VALID HOURS: 229
TOTAL HOURS FOR THE PERIOD: 231

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 4/ 1/85 0:00 TO 6/30/05 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	2	0	4	4	13	46	91	1	1	0	0	0	162
NNE	0	1	1	6	15	63	69	0	0	0	0	0	155
NE	0	1	0	5	12	59	112	5	0	0	0	0	194
ENE	0	3	1	10	17	34	34	2	0	0	0	0	101
E	0	0	3	12	18	43	12	0	0	0	0	0	88
ESE	1	2	3	16	25	69	109	16	0	0	0	0	241
SE	0	1	2	5	9	46	106	9	2	0	0	0	180
SSE	0	0	1	5	18	56	58	9	2	0	0	0	149
S	0	0	1	8	10	52	82	10	2	0	0	0	165
SSW	0	0	1	3	6	40	43	12	0	0	0	0	105
SW	0	0	1	6	9	22	9	3	2	0	0	0	52
WSW	0	0	1	5	10	36	30	5	1	0	0	0	88
W	0	2	1	6	14	43	38	0	1	0	0	0	105
WNW	0	0	1	9	10	26	26	4	1	0	0	0	77
NW	0	1	0	3	6	17	19	14	2	0	0	0	62
NNW	0	0	1	5	2	23	40	14	0	0	0	0	85
TOTAL	3	11	22	108	194	675	878	104	14	0	0	0	2009

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 175
NUMBER OF VALID HOURS: 2009
TOTAL HOURS FOR THE PERIOD: 2184

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 4/ 1/05 0:00 TO 6/30/05 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	0	4	0	0	0	0	0	4
NE	0	0	0	0	1	0	9	4	0	0	0	0	14
ENE	0	0	0	0	0	0	7	0	0	0	0	0	7
E	0	0	0	0	0	1	0	0	0	0	0	0	1
ESE	0	0	0	0	0	0	1	0	0	0	0	0	1
SE	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	1	1	22	4	0	0	0	0	28

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 28
TOTAL HOURS FOR THE PERIOD: 28

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 4/ 1/05 0:00 TO 6/30/05 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	2	0	1	0	0	0	3
NNE	0	0	0	0	0	0	5	0	0	0	0	0	5
NE	0	0	0	0	1	6	7	0	0	0	0	0	14
ENE	0	0	0	1	0	3	3	0	0	0	0	0	7
E	0	0	0	1	1	0	2	0	0	0	0	0	4
ESE	0	0	0	1	0	2	4	1	0	0	0	0	8
SE	0	0	0	0	0	1	8	2	0	0	0	0	11
SSE	0	0	0	0	0	0	0	1	0	0	0	0	1
S	0	0	0	0	0	0	0	3	2	0	0	0	5
SSW	0	0	0	0	0	0	0	2	0	0	0	0	2
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	2	1	0	0	0	0	0	3
W	0	0	0	0	0	0	1	0	1	0	0	0	2
WNW	0	0	0	0	0	0	0	1	0	0	0	0	1
NW	0	0	0	0	0	0	0	6	1	0	0	0	7
NNW	0	0	0	0	0	0	1	5	0	0	0	0	6
TOTAL	0	0	0	3	2	14	34	21	5	0	0	0	79

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 79
TOTAL HOURS FOR THE PERIOD: 79

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 4/ 1/05 0:00 TO 6/30/05 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	3	0	0	0	0	0	3
NNE	0	0	0	0	0	1	1	0	0	0	0	0	2
NE	0	0	0	0	0	5	6	0	0	0	0	0	11
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	2	1	0	0	0	0	0	3
ESE	0	0	0	0	0	6	6	3	0	0	0	0	15
SE	0	1	0	0	0	2	6	1	0	0	0	0	10
SSE	0	0	0	0	0	0	5	0	0	0	0	0	5
S	0	0	0	0	0	0	5	1	0	0	0	0	6
SSW	0	0	0	0	0	0	1	2	0	0	0	0	3
SW	0	0	0	0	0	0	1	0	1	0	0	0	2
WSW	0	0	0	0	0	2	2	2	0	0	0	0	6
W	0	0	0	0	0	0	3	0	0	0	0	0	3
WNW	0	0	0	0	0	0	2	0	1	0	0	0	3
NW	0	0	0	0	0	0	1	1	0	0	0	0	2
NNW	0	0	0	0	0	1	2	3	0	0	0	0	6
TOTAL	0	1	0	0	0	19	45	13	2	0	0	0	80

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 80
TOTAL HOURS FOR THE PERIOD: 80

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 4/ 1/05 0:00 TO 6/30/05 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	1	0	2	3	3	26	44	1	0	0	0	0	80
NNE	0	0	0	2	7	37	10	0	0	0	0	0	56
NE	0	0	0	3	4	18	11	0	0	0	0	0	36
ENE	0	0	0	2	9	18	6	1	0	0	0	0	36
E	0	0	2	0	3	15	2	0	0	0	0	0	22
ESE	0	1	0	5	9	25	31	11	0	0	0	0	82
SE	0	0	0	1	3	21	22	4	2	0	0	0	53
SSE	0	0	0	0	6	24	28	5	2	0	0	0	65
S	0	0	0	2	2	18	42	6	0	0	0	0	70
SSW	0	0	0	0	3	12	16	8	0	0	0	0	39
SW	0	0	0	0	4	10	4	3	1	0	0	0	22
WSW	0	0	0	0	3	18	11	3	1	0	0	0	36
W	0	0	0	1	8	27	21	0	0	0	0	0	57
WNW	0	0	0	3	3	15	9	3	0	0	0	0	33
NW	0	0	0	1	5	9	8	4	1	0	0	0	28
NNW	0	0	0	3	1	14	19	5	0	0	0	0	42
TOTAL	1	1	4	26	73	307	284	54	7	0	0	0	757

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 757
 TOTAL HOURS FOR THE PERIOD: 757

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 4/ 1/05 0:00 TO 6/30/05 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	2	13	18	0	0	0	0	0	35
NNE	0	0	1	1	3	12	21	0	0	0	0	0	38
NE	0	0	0	1	6	11	40	1	0	0	0	0	59
ENE	0	0	1	1	3	6	10	1	0	0	0	0	22
E	0	0	0	5	7	8	7	0	0	0	0	0	27
ESE	0	1	2	4	11	25	40	1	0	0	0	0	84
SE	0	0	0	1	1	10	33	2	0	0	0	0	47
SSE	0	0	0	0	2	9	18	3	0	0	0	0	32
S	0	0	0	2	0	17	29	0	0	0	0	0	48
SSW	0	0	1	3	1	16	22	0	0	0	0	0	43
SW	0	0	0	1	1	2	4	0	0	0	0	0	8
WSW	0	0	0	3	3	6	12	0	0	0	0	0	24
W	0	0	1	1	3	5	11	0	0	0	0	0	21
WNW	0	0	0	4	2	5	7	0	0	0	0	0	18
NW	0	0	0	0	1	4	5	3	0	0	0	0	13
NNW	0	0	0	0	1	3	8	1	0	0	0	0	13
TOTAL	0	1	7	28	47	152	285	12	0	0	0	0	532

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 532
 TOTAL HOURS FOR THE PERIOD: 532

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 4/ 1/05 0:00 TO 6/30/05 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	1	0	1	0	3	4	16	0	0	0	0	0	25
NNE	0	0	0	2	5	4	18	0	0	0	0	0	29
NE	0	0	0	0	0	9	30	0	0	0	0	0	39
ENE	0	2	0	4	3	4	7	0	0	0	0	0	20
E	0	0	0	5	2	12	0	0	0	0	0	0	19
ESE	1	0	0	1	1	7	23	0	0	0	0	0	33
SE	0	0	1	1	2	7	27	0	0	0	0	0	38
SSE	0	0	0	1	5	13	3	0	0	0	0	0	22
S	0	0	1	3	4	5	5	0	0	0	0	0	18
SSW	0	0	0	0	2	5	3	0	0	0	0	0	10
SW	0	0	0	0	1	7	0	0	0	0	0	0	8
WSW	0	0	0	1	2	2	0	0	0	0	0	0	5
W	0	0	0	2	0	4	1	0	0	0	0	0	7
WNW	0	0	0	2	2	3	6	0	0	0	0	0	13
NW	0	1	0	1	0	4	3	0	0	0	0	0	9
NNW	0	0	0	0	0	3	4	0	0	0	0	0	7
TOTAL	2	3	3	23	32	93	146	0	0	0	0	0	302

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 302
 TOTAL HOURS FOR THE PERIOD: 302

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 4/ 1/05 0:00 TO 6/30/05 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	3	8	0	0	0	0	0	16
NNE	0	1	0	1	0	9	10	0	0	0	0	0	21
NE	0	1	0	1	0	10	9	0	0	0	0	0	21
ENE	0	1	0	2	2	3	1	0	0	0	0	0	9
E	0	0	1	1	5	5	0	0	0	0	0	0	12
ESE	0	0	1	5	4	4	4	0	0	0	0	0	18
SE	0	0	1	2	3	5	9	0	0	0	0	0	20
SSE	0	0	1	4	5	10	4	0	0	0	0	0	24
S	0	0	0	1	4	12	1	0	0	0	0	0	18
SSW	0	0	0	0	0	7	1	0	0	0	0	0	8
SW	0	0	1	5	3	3	0	0	0	0	0	0	12
WSW	0	0	1	1	2	6	4	0	0	0	0	0	14
W	0	2	0	2	3	7	1	0	0	0	0	0	15
WNW	0	0	1	0	3	3	2	0	0	0	0	0	9
NW	0	0	0	1	0	0	2	0	0	0	0	0	3
NNW	0	0	1	2	0	2	6	0	0	0	0	0	11
TOTAL	0	5	8	28	39	89	62	0	0	0	0	0	231

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 231
 TOTAL HOURS FOR THE PERIOD: 231

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 7/ 1/05 0:00 TO 9/30/05 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	17	28	27	51	25	32	9	2	1	0	0	0	192
NNE	22	27	35	75	40	22	4	0	0	0	0	0	225
NE	16	12	26	40	38	35	12	0	0	0	0	0	179
ENE	11	11	14	38	19	20	5	0	0	0	0	0	118
E	5	13	23	24	7	3	2	0	0	0	0	0	77
ESE	0	14	14	23	5	4	2	0	0	0	0	0	62
SE	0	3	30	30	27	16	4	3	0	0	0	0	113
SSE	2	12	9	32	11	10	4	7	5	0	0	0	92
S	0	13	11	25	24	32	14	3	0	0	0	0	122
SSW	1	10	18	40	25	20	4	4	0	0	0	0	122
SW	5	11	16	11	21	12	0	0	0	0	0	0	76
WSW	6	9	18	19	24	25	0	0	0	0	0	0	101
W	9	26	7	31	33	34	0	0	0	0	0	0	140
WNW	6	33	26	28	28	26	3	2	0	0	0	0	152
NW	34	49	20	25	16	26	2	1	2	0	0	0	175
NNW	29	35	22	22	11	17	0	1	2	0	0	0	139
TOTAL	163	306	316	514	354	334	65	23	10	0	0	0	2005

NUMBER OF CALMS: 2
NUMBER OF INVALID HOURS: 121
NUMBER OF VALID HOURS: 2087
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 7/ 1/05 0:00 TO 9/30/05 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	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	3	0	0	0	0	0	0	3
NE	0	0	0	0	1	11	0	0	0	0	0	0	12
ENE	0	0	0	0	5	12	0	0	0	0	0	0	17
E	0	0	0	0	1	2	0	0	0	0	0	0	3
ESE	0	0	0	0	0	3	0	0	0	0	0	0	3
SE	0	0	0	0	0	2	0	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	1	0	0	0	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	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL	0	0	1	0	7	34	2	0	0	0	0	0	44

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 44
TOTAL HOURS FOR THE PERIOD: 44

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 7/ 1/05 0:00 TO 9/30/05 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	3	2	0	0	0	0	0	5
NNE	0	0	0	0	1	6	1	0	0	0	0	0	8
NE	0	0	0	1	8	4	0	0	0	0	0	0	13
ENE	0	0	0	0	2	2	0	0	0	0	0	0	4
E	0	0	0	2	1	1	0	0	0	0	0	0	4
ESE	0	0	0	0	2	0	0	0	0	0	0	0	2
SE	0	0	0	0	1	3	0	0	0	0	0	0	4
SSE	0	0	0	0	0	2	0	0	0	0	0	0	2
S	0	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	1	0	0	0	0	0	0	1
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	1	0	0	0	0	0	0	1
NW	0	0	0	0	0	3	1	0	0	0	0	0	4
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	3	15	26	4	0	0	0	0	0	48

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 48
 TOTAL HOURS FOR THE PERIOD: 48

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 7/ 1/05 0:00 TO 9/30/05 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	1	0	0	3	0	0	0	0	0	0	4
NNE	0	0	0	0	4	5	0	0	0	0	0	0	9
NE	0	0	0	2	5	2	0	0	0	0	0	0	9
ENE	0	0	0	1	2	1	0	0	0	0	0	0	4
E	0	0	0	1	3	0	0	0	0	0	0	0	4
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	3	3	0	0	0	0	0	0	6
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	0	0	0	0	0	0	0	0
SW	0	0	0	0	1	1	0	0	0	0	0	0	2
WSW	0	0	0	0	0	2	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	0	4	0	0	0	0	0	0	4
NW	0	0	0	0	0	1	0	0	0	0	0	0	1
NNW	0	0	1	0	0	4	0	0	0	0	0	0	5
TOTAL	0	0	2	4	18	27	0	0	0	0	0	0	51

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 51
 TOTAL HOURS FOR THE PERIOD: 51

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 7/ 1/05 0:00 TO 9/30/05 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	0	0	9	19	24	7	1	0	0	0	0	61
NNE	0	0	3	9	24	7	1	0	0	0	0	0	44
NE	1	0	3	12	15	5	4	0	0	0	0	0	40
ENE	0	1	3	7	8	4	3	0	0	0	0	0	26
E	0	0	6	11	1	0	2	0	0	0	0	0	20
ESE	0	2	2	10	3	1	2	0	0	0	0	0	20
SE	0	1	2	11	20	6	4	3	0	0	0	0	47
SSE	0	0	1	4	8	7	0	3	5	0	0	0	28
S	0	0	2	5	11	27	8	1	0	0	0	0	54
SSW	0	0	0	11	16	15	3	4	0	0	0	0	49
SW	0	0	0	4	19	11	0	0	0	0	0	0	34
WSW	0	0	3	13	24	21	0	0	0	0	0	0	61
W	0	2	0	15	31	31	0	0	0	0	0	0	79
WNW	0	1	2	15	21	14	0	1	0	0	0	0	54
NW	0	0	0	16	15	15	0	1	1	0	0	0	48
NNW	0	0	2	12	11	12	0	1	1	0	0	0	39
TOTAL	2	7	29	164	246	200	34	15	7	0	0	0	704

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 704
TOTAL HOURS FOR THE PERIOD: 704

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 7/ 1/05 0:00 TO 9/30/05 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	8	13	21	6	2	0	1	1	0	0	0	53
NNE	1	8	15	43	10	0	2	0	0	0	0	0	79
NE	2	3	18	19	8	13	8	0	0	0	0	0	71
ENE	1	6	9	22	2	1	2	0	0	0	0	0	43
E	1	6	11	9	1	0	0	0	0	0	0	0	28
ESE	0	7	9	12	0	0	0	0	0	0	0	0	28
SE	0	1	22	15	3	2	0	0	0	0	0	0	43
SSE	2	7	7	19	3	1	4	4	0	0	0	0	47
S	0	8	5	15	13	5	6	2	0	0	0	0	54
SSW	0	4	13	27	9	5	1	0	0	0	0	0	59
SW	1	4	10	5	1	0	0	0	0	0	0	0	21
WSW	4	5	9	6	0	1	0	0	0	0	0	0	25
W	1	6	4	15	2	2	0	0	0	0	0	0	30
WNW	2	4	18	11	7	6	2	1	0	0	0	0	51
NW	2	4	8	8	1	6	0	0	1	0	0	0	30
NNW	2	3	7	5	0	0	0	0	1	0	0	0	18
TOTAL	20	84	178	252	66	44	25	8	3	0	0	0	680

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 680
TOTAL HOURS FOR THE PERIOD: 680

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 7/ 1/05 0:00 TO 9/30/05 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	10	11	19	0	0	0	0	0	0	0	0	47
NNE	4	9	15	23	1	1	0	0	0	0	0	0	53
NE	6	6	4	6	1	0	0	0	0	0	0	0	23
ENE	4	2	1	6	0	0	0	0	0	0	0	0	13
E	3	6	5	0	0	0	0	0	0	0	0	0	14
ESE	0	5	3	1	0	0	0	0	0	0	0	0	9
SE	0	1	5	4	0	0	0	0	0	0	0	0	10
SSE	0	5	0	9	0	0	0	0	0	0	0	0	14
S	0	4	4	5	0	0	0	0	0	0	0	0	13
SSW	1	4	3	2	0	0	0	0	0	0	0	0	10
SW	3	7	6	2	0	0	0	0	0	0	0	0	18
WSW	0	3	5	0	0	0	0	0	0	0	0	0	8
W	6	13	3	1	0	0	0	0	0	0	0	0	23
WNW	2	18	6	2	0	0	0	0	0	0	0	0	28
NW	9	17	8	1	0	1	0	0	0	0	0	0	36
NNW	7	7	7	1	0	0	0	0	0	0	0	0	22
TOTAL	52	117	86	82	2	2	0	0	0	0	0	0	341

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 341
 TOTAL HOURS FOR THE PERIOD: 341

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 7/ 1/05 0:00 TO 9/30/05 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	8	10	2	2	0	0	0	0	0	0	0	0	22
NNE	17	10	2	0	0	0	0	0	0	0	0	0	29
NE	7	3	1	0	0	0	0	0	0	0	0	0	11
ENE	6	2	1	2	0	0	0	0	0	0	0	0	11
E	1	1	1	1	0	0	0	0	0	0	0	0	4
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	1	0	0	0	0	0	0	0	0	0	1
SSE	0	0	1	0	0	0	0	0	0	0	0	0	1
S	0	1	0	0	0	0	0	0	0	0	0	0	1
SSW	0	2	1	0	0	0	0	0	0	0	0	0	3
SW	1	0	0	0	0	0	0	0	0	0	0	0	1
WSW	2	1	1	0	0	0	0	0	0	0	0	0	4
W	2	5	0	0	0	0	0	0	0	0	0	0	7
WNW	2	10	0	0	0	1	0	0	0	0	0	0	13
NW	23	28	4	0	0	0	0	0	0	0	0	0	55
NNW	20	25	5	4	0	0	0	0	0	0	0	0	54
TOTAL	89	98	20	9	0	1	0	0	0	0	0	0	217

NUMBER OF CALMS: 2
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 219
 TOTAL HOURS FOR THE PERIOD: 219

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 7/ 1/05 0:00 TO 9/30/05 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	7	13	22	32	2	2	1	0	0	81
NNE	0	1	2	7	13	47	48	4	1	0	0	0	123
NE	0	1	2	12	20	71	161	11	2	2	0	0	282
ENE	0	2	5	19	35	61	93	24	16	5	0	0	260
E	0	1	6	9	28	39	14	2	1	1	0	0	101
ESE	0	1	3	9	22	42	69	0	1	6	0	0	153
SE	1	1	1	7	13	44	24	0	0	2	1	0	94
SSE	0	0	3	7	15	22	3	0	7	5	0	0	62
S	1	1	0	16	24	57	36	7	3	0	0	0	145
SSW	0	1	3	9	25	68	27	2	7	0	0	0	142
SW	0	1	2	9	20	35	11	0	0	0	0	0	78
WSW	0	1	3	13	26	51	21	0	0	0	0	0	115
W	0	0	3	18	35	83	38	2	0	0	0	0	179
WNW	0	2	2	11	24	47	22	1	3	1	0	0	113
NW	0	0	3	13	24	28	20	0	1	1	1	0	91
NNW	0	0	0	14	16	18	17	1	0	0	2	0	68
TOTAL	2	14	39	180	353	735	636	56	44	24	4	0	2087

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 121
NUMBER OF VALID HOURS: 2087
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 7/ 1/05 0:00 TO 9/30/05 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	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	2	4	0	0	0	0	6
ENE	0	0	0	0	0	0	18	10	0	0	0	0	28
E	0	0	0	0	0	0	3	1	0	0	0	0	4
ESE	0	0	0	0	0	0	1	0	0	0	0	0	1
SE	0	0	0	0	0	0	1	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	1	0	0	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	0	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	2	0	0	0	0	0	2
NW	0	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL	0	0	0	1	0	0	28	15	0	0	0	0	44

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 44
TOTAL HOURS FOR THE PERIOD: 44

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 7/ 1/05 0:00 TO 9/30/05 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	1	0	0	0	0	5
NNE	0	0	0	0	0	0	3	1	0	0	0	0	4
NE	0	0	0	0	0	1	7	1	0	0	0	0	9
ENE	0	0	0	0	0	4	7	4	0	0	0	0	15
E	0	0	0	0	0	2	1	0	0	0	0	0	3
ESE	0	0	0	0	0	1	3	0	0	0	0	0	4
SE	0	0	0	0	0	0	2	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	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	1	0	0	0	0	0	1
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	2	0	0	0	0	0	2
NW	0	0	0	0	0	0	3	0	0	0	0	0	3
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	10	31	7	0	0	0	0	48

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 48
 TOTAL HOURS FOR THE PERIOD: 48

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 7/ 1/05 0:00 TO 9/30/05 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	2	0	0	0	0	0	3
NNE	0	0	0	0	0	2	1	0	0	0	0	0	3
NE	0	0	0	0	0	5	7	0	0	0	0	0	12
ENE	0	0	0	0	0	4	6	0	0	0	0	0	10
E	0	0	0	0	0	2	0	0	0	0	0	0	2
ESE	0	0	0	0	0	2	3	0	0	0	0	0	5
SE	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	1	1	0	0	0	0	0	2
WSW	0	0	0	0	0	0	2	0	0	0	0	0	2
W	0	0	0	0	0	0	1	0	0	0	0	0	1
WNW	0	0	0	0	0	1	4	0	0	0	0	0	5
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	1	0	0	3	0	0	0	0	0	4
TOTAL	0	0	0	1	1	17	32	0	0	0	0	0	51

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 51
 TOTAL HOURS FOR THE PERIOD: 51

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 7/ 1/05 0:00 TO 9/30/05 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	6	7	17	1	1	0	0	0	35
NNE	0	0	0	4	9	19	19	1	1	0	0	0	53
NE	0	0	1	4	5	19	19	2	0	0	0	0	50
ENE	0	0	1	3	7	14	17	5	7	2	0	0	56
E	0	0	0	0	9	11	3	0	1	1	0	0	25
ESE	0	0	1	0	5	8	16	0	1	6	0	0	37
SE	0	0	0	3	4	11	4	0	0	2	1	0	25
SSE	0	0	0	1	1	5	3	0	1	5	0	0	16
S	0	0	0	6	7	18	19	3	0	0	0	0	53
SSW	0	0	0	2	7	18	12	2	7	0	0	0	48
SW	0	0	0	1	5	16	10	0	0	0	0	0	32
WSW	0	0	0	3	15	30	14	0	0	0	0	0	62
W	0	0	0	4	19	57	20	0	0	0	0	0	100
WNW	0	0	0	6	9	17	7	0	1	1	0	0	41
NW	0	0	1	3	12	13	9	0	1	0	1	0	40
NNW	0	0	0	4	9	9	7	1	0	0	1	0	31
TOTAL	0	0	4	47	129	272	196	15	21	17	3	0	704

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 704
TOTAL HOURS FOR THE PERIOD: 704

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 7/ 1/05 0:00 TO 9/30/05 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	2	8	7	0	1	1	0	0	20
NNE	0	0	2	2	1	15	11	1	0	0	0	0	32
NE	0	1	1	4	8	35	60	4	2	2	0	0	117
ENE	0	1	3	7	13	27	29	5	9	3	0	0	97
E	0	0	2	4	10	12	5	1	0	0	0	0	34
ESE	0	1	0	3	5	16	28	0	0	0	0	0	53
SE	0	1	0	2	3	16	10	0	0	0	0	0	32
SSE	0	0	1	0	2	12	0	0	6	0	0	0	21
S	0	1	0	4	9	23	14	4	3	0	0	0	58
SSW	0	0	1	1	7	33	14	0	0	0	0	0	56
SW	0	0	0	3	5	10	0	0	0	0	0	0	18
WSW	0	0	1	2	4	10	4	0	0	0	0	0	21
W	0	0	0	7	11	14	15	2	0	0	0	0	49
WNW	0	0	2	3	7	9	6	1	2	0	0	0	30
NW	0	0	1	7	6	3	5	0	0	1	0	0	23
NNW	0	0	0	6	6	5	1	0	0	0	1	0	19
TOTAL	0	5	14	56	99	248	209	18	23	7	1	0	680

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 680
TOTAL HOURS FOR THE PERIOD: 680

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 7/ 1/05 0:00 TO 9/30/05 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	3	4	4	0	0	0	0	0	13
NNE	0	0	0	1	2	6	12	1	0	0	0	0	22
NE	0	0	0	2	4	6	49	0	0	0	0	0	61
ENE	0	0	0	5	10	10	11	0	0	0	0	0	36
E	0	0	3	4	1	8	2	0	0	0	0	0	18
ESE	0	0	1	5	9	11	14	0	0	0	0	0	40
SE	0	0	0	1	3	8	6	0	0	0	0	0	18
SSE	0	0	1	1	5	2	0	0	0	0	0	0	9
S	0	0	0	3	4	10	3	0	0	0	0	0	20
SSW	0	1	0	1	4	13	1	0	0	0	0	0	20
SW	0	0	1	0	7	5	0	0	0	0	0	0	13
WSW	0	1	1	3	3	8	0	0	0	0	0	0	16
W	0	0	1	4	3	10	1	0	0	0	0	0	19
WNW	0	0	0	1	3	12	1	0	0	0	0	0	17
NW	0	0	0	0	3	6	2	0	0	0	0	0	11
NNW	0	0	0	1	1	2	4	0	0	0	0	0	8
TOTAL	0	3	8	33	65	121	110	1	0	0	0	0	341

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 341
 TOTAL HOURS FOR THE PERIOD: 341

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 7/ 1/05 0:00 TO 9/30/05 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	2	1	1	0	0	0	0	0	0	5
NNE	0	1	0	0	1	5	2	0	0	0	0	0	9
NE	0	0	0	2	3	5	17	0	0	0	0	0	27
ENE	0	1	1	4	5	2	5	0	0	0	0	0	18
E	0	1	1	1	8	4	0	0	0	0	0	0	15
ESE	0	0	1	1	3	4	4	0	0	0	0	0	13
SE	1	0	1	1	3	9	0	0	0	0	0	0	15
SSE	0	0	1	5	7	3	0	0	0	0	0	0	16
S	1	0	0	3	4	6	0	0	0	0	0	0	14
SSW	0	0	2	4	7	4	0	0	0	0	0	0	17
SW	0	1	1	5	3	3	0	0	0	0	0	0	13
WSW	0	0	1	5	4	3	0	0	0	0	0	0	13
W	0	0	2	3	2	2	1	0	0	0	0	0	10
WNW	0	2	0	1	5	8	0	0	0	0	0	0	16
NW	0	0	1	3	3	6	0	0	0	0	0	0	13
NNW	0	0	0	2	0	2	1	0	0	0	0	0	5
TOTAL	2	6	13	42	59	67	30	0	0	0	0	0	219

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 219
 TOTAL HOURS FOR THE PERIOD: 219

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 10/ 1/05 0:00 TO 12/31/05 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	25	56	39	109	84	141	58	0	0	0	0	0	512
NNE	14	14	19	77	50	38	7	0	0	0	0	0	219
NE	16	19	19	47	42	20	0	0	0	0	0	0	163
ENE	6	23	21	19	13	9	0	0	0	0	0	0	91
E	5	23	15	15	10	5	0	0	0	1	0	0	74
ESE	2	12	19	21	16	0	0	0	0	0	0	0	70
SE	3	8	13	37	37	29	2	0	0	0	0	1	130
SSE	1	10	6	22	15	24	21	0	0	0	0	1	100
S	1	6	3	12	14	24	34	0	0	0	0	0	94
SSW	0	2	4	16	12	20	7	0	0	0	0	0	61
SW	1	4	5	12	5	4	4	0	0	0	0	0	35
WSW	2	10	4	3	5	5	0	0	0	0	0	0	29
W	1	11	14	14	6	9	1	2	0	0	0	0	58
WNW	3	19	20	17	13	8	6	0	0	0	0	0	86
NW	5	28	27	16	8	15	17	0	0	0	0	0	116
NNW	8	24	16	30	25	61	53	1	0	0	0	0	218
TOTAL	93	269	244	467	355	412	210	3	0	1	0	2	2056

NUMBER OF CALMS: 5
NUMBER OF INVALID HOURS: 147
NUMBER OF VALID HOURS: 2061
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 10/ 1/05 0:00 TO 12/31/05 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	2	4	11	4	0	0	0	0	0	21
NNE	0	0	0	0	2	17	6	0	0	0	0	0	25
NE	0	0	0	0	3	7	0	0	0	0	0	0	10
ENE	0	0	0	1	2	7	0	0	0	0	0	0	10
E	0	0	0	0	3	2	0	0	0	1	0	0	6
ESE	0	0	0	1	5	0	0	0	0	0	0	0	6
SE	0	0	0	0	5	8	0	0	0	0	0	1	14
SSE	0	0	0	0	1	1	2	0	0	0	0	1	5
S	0	0	0	0	0	1	0	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	1	0	0	0	0	0	0	0	1
WNW	0	0	0	1	0	0	0	0	0	0	0	0	1
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	5	4	6	0	0	0	0	0	15
TOTAL	0	0	0	5	31	58	19	0	0	1	0	2	116

NUMBER OF CALMS: 2
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 118
TOTAL HOURS FOR THE PERIOD: 118

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 10/ 1/05 0:00 TO 12/31/05 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	2	1	18	9	0	0	0	0	0	30
NNE	0	0	0	0	1	5	0	0	0	0	0	0	6
NE	0	0	0	0	7	0	0	0	0	0	0	0	7
ENE	0	0	0	0	2	0	0	0	0	0	0	0	2
E	0	0	0	0	0	1	0	0	0	0	0	0	1
ESE	0	0	0	0	5	0	0	0	0	0	0	0	5
SE	0	0	0	0	4	10	0	0	0	0	0	0	14
SSE	0	0	0	0	0	2	4	0	0	0	0	0	6
S	0	0	0	0	1	2	2	0	0	0	0	0	5
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	1	1	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	0	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	1	4	0	0	0	0	0	5
NNW	0	0	0	0	0	2	9	0	0	0	0	0	11
TOTAL	0	0	0	2	23	43	28	0	0	0	0	0	96

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 96
 TOTAL HOURS FOR THE PERIOD: 96

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 10/ 1/05 0:00 TO 12/31/05 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	1	5	3	0	0	0	0	0	12
NNE	0	0	1	0	1	0	0	0	0	0	0	0	2
NE	0	0	0	0	6	0	0	0	0	0	0	0	6
ENE	0	0	0	1	0	0	0	0	0	0	0	0	1
E	0	0	0	2	1	1	0	0	0	0	0	0	4
ESE	0	0	0	0	2	0	0	0	0	0	0	0	2
SE	0	0	0	0	1	2	0	0	0	0	0	0	3
SSE	0	0	0	0	0	0	1	0	0	0	0	0	1
S	0	0	0	0	0	5	8	0	0	0	0	0	13
SSW	0	0	0	0	0	4	3	0	0	0	0	0	7
SW	0	0	0	0	0	1	2	0	0	0	0	0	3
WSW	0	0	0	0	0	1	0	0	0	0	0	0	1
W	0	0	0	0	0	2	0	0	0	0	0	0	2
WNW	0	0	0	0	0	1	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	3	5	0	0	0	0	0	8
TOTAL	0	0	1	6	12	25	26	0	0	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 D

FROM 10/ 1/05 0:00 TO 12/31/05 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	3	12	33	68	32	0	0	0	0	0	148
NNE	0	0	4	5	12	8	1	0	0	0	0	0	30
NE	1	1	3	2	10	3	0	0	0	0	0	0	20
ENE	0	0	0	5	6	2	0	0	0	0	0	0	13
E	0	0	2	7	2	0	0	0	0	0	0	0	11
ESE	0	0	3	10	3	0	0	0	0	0	0	0	16
SE	0	1	0	4	5	4	1	0	0	0	0	0	15
SSE	0	2	1	2	4	15	11	0	0	0	0	0	35
S	0	0	0	0	6	9	20	0	0	0	0	0	35
SSW	0	0	0	0	8	14	4	0	0	0	0	0	26
SW	0	0	1	5	4	0	2	0	0	0	0	0	12
WSW	0	0	0	3	4	3	0	0	0	0	0	0	10
W	0	0	0	8	4	7	1	2	0	0	0	0	22
WNW	0	0	1	6	6	6	4	0	0	0	0	0	23
NW	0	0	0	2	4	13	10	0	0	0	0	0	29
NNW	0	0	0	3	8	41	31	1	0	0	0	0	84
TOTAL	1	4	18	74	119	193	117	3	0	0	0	0	529

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 529
TOTAL HOURS FOR THE PERIOD: 529

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 10/ 1/05 0:00 TO 12/31/05 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	4	5	41	39	39	10	0	0	0	0	0	138
NNE	0	0	4	37	32	8	0	0	0	0	0	0	81
NE	1	2	7	22	14	9	0	0	0	0	0	0	55
ENE	2	1	9	8	3	0	0	0	0	0	0	0	23
E	1	3	6	3	4	1	0	0	0	0	0	0	18
ESE	0	4	9	7	1	0	0	0	0	0	0	0	21
SE	2	4	8	17	18	5	1	0	0	0	0	0	55
SSE	0	1	2	11	9	6	3	0	0	0	0	0	32
S	0	2	0	9	6	7	4	0	0	0	0	0	28
SSW	0	1	2	9	4	1	0	0	0	0	0	0	17
SW	0	0	3	2	1	3	0	0	0	0	0	0	9
WSW	0	2	2	0	0	0	0	0	0	0	0	0	4
W	0	0	6	5	0	0	0	0	0	0	0	0	11
WNW	0	1	3	5	5	1	0	0	0	0	0	0	15
NW	0	3	2	6	3	1	0	0	0	0	0	0	15
NNW	0	1	7	8	12	10	2	0	0	0	0	0	40
TOTAL	6	29	75	190	151	91	20	0	0	0	0	0	562

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 562
TOTAL HOURS FOR THE PERIOD: 562

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 10/ 1/05 0:00 TO 12/31/05 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	3	8	29	6	0	0	0	0	0	0	0	46
NNE	0	1	2	33	2	0	0	0	0	0	0	0	38
NE	0	0	3	20	2	1	0	0	0	0	0	0	26
ENE	0	2	8	3	0	0	0	0	0	0	0	0	13
E	0	9	1	2	0	0	0	0	0	0	0	0	12
ESE	1	5	4	2	0	0	0	0	0	0	0	0	12
SE	1	1	3	12	4	0	0	0	0	0	0	0	21
SSE	1	4	3	8	1	0	0	0	0	0	0	0	17
S	1	2	3	2	1	0	0	0	0	0	0	0	9
SSW	0	1	2	7	0	0	0	0	0	0	0	0	10
SW	0	0	1	5	0	0	0	0	0	0	0	0	6
WSW	0	2	1	0	0	0	0	0	0	0	0	0	3
W	0	2	3	1	0	0	0	0	0	0	0	0	6
WNW	0	2	5	3	2	0	0	0	0	0	0	0	12
NW	0	2	2	5	1	0	0	0	0	0	0	0	10
NNW	0	2	4	12	0	1	0	0	0	0	0	0	19
TOTAL	4	38	53	144	19	2	0	0	0	0	0	0	260

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 260
 TOTAL HOURS FOR THE PERIOD: 260

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 10/ 1/05 0:00 TO 12/31/05 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	25	49	23	20	0	0	0	0	0	0	0	0	117
NNE	14	13	8	2	0	0	0	0	0	0	0	0	37
NE	14	16	6	3	0	0	0	0	0	0	0	0	39
ENE	4	20	4	1	0	0	0	0	0	0	0	0	29
E	4	11	6	1	0	0	0	0	0	0	0	0	22
ESE	1	3	3	1	0	0	0	0	0	0	0	0	8
SE	0	2	2	4	0	0	0	0	0	0	0	0	8
SSE	0	3	0	1	0	0	0	0	0	0	0	0	4
S	0	2	0	1	0	0	0	0	0	0	0	0	3
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	1	4	0	0	0	0	0	0	0	0	0	0	5
WSW	2	6	1	0	0	0	0	0	0	0	0	0	9
W	1	9	5	0	0	0	0	0	0	0	0	0	15
WNW	3	16	11	2	0	0	0	0	0	0	0	0	32
NW	5	23	23	3	0	0	0	0	0	0	0	0	54
NNW	8	21	5	7	0	0	0	0	0	0	0	0	41
TOTAL	82	198	97	46	0	0	0	0	0	0	0	0	423

NUMBER OF CALMS: 3
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 426
 TOTAL HOURS FOR THE PERIOD: 426

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 10/ 1/05 0:00 TO 12/31/05 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	6	7	68	135	17	0	0	0	0	234
NNE	0	0	0	7	13	77	156	4	0	0	0	0	257
NE	1	0	0	7	11	45	159	8	0	0	0	0	231
ENE	1	0	1	4	9	31	69	44	1	0	0	0	160
E	1	0	0	8	8	19	37	1	0	0	0	0	74
ESE	0	0	2	4	5	19	105	7	0	1	0	2	145
SE	0	0	1	2	8	22	76	2	0	0	0	0	111
SSE	0	0	2	5	10	40	52	8	0	0	0	0	117
S	0	0	1	2	10	36	64	20	0	0	0	0	133
SSW	0	0	1	3	9	33	27	8	3	0	0	0	84
SW	0	1	1	3	5	16	14	3	0	0	0	0	43
WSW	0	1	2	3	9	26	7	0	0	0	0	0	48
W	0	0	1	2	9	40	24	1	0	0	0	0	77
WNW	0	0	1	4	4	40	38	4	0	0	0	0	91
NW	1	0	1	2	3	27	47	5	0	0	0	0	86
NNW	0	0	0	1	6	18	112	30	0	0	0	0	167
TOTAL	4	2	15	63	126	557	1122	162	4	1	0	2	2058

NUMBER OF CALMS: 3
NUMBER OF INVALID HOURS: 147
NUMBER OF VALID HOURS: 2061
TOTAL HOURS FOR THE PERIOD: 2208

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS A

FROM 10/ 1/05 0:00 TO 12/31/05 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	4	0	0	0	0	0	4
NNE	0	0	0	0	0	3	11	2	0	0	0	0	16
NE	0	0	0	0	0	5	18	3	0	0	0	0	26
ENE	0	0	0	0	0	3	15	5	0	0	0	0	23
E	0	0	0	0	0	0	13	0	0	0	0	0	13
ESE	0	0	0	0	1	3	5	0	0	1	0	2	12
SE	0	0	0	0	1	1	5	0	0	0	0	0	7
SSE	0	0	0	0	0	1	2	0	0	0	0	0	3
S	0	0	0	0	1	0	1	0	0	0	0	0	2
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	1	0	0	0	0	0	0	0	1
WNW	0	0	0	0	1	0	0	0	0	0	0	0	1
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	0	1	6	0	0	0	0	7
TOTAL	0	0	0	0	5	16	76	16	0	1	0	2	116

NUMBER OF CALMS: 2
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 118
TOTAL HOURS FOR THE PERIOD: 118

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 10/ 1/05 0:00 TO 12/31/05 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	4	6	3	0	0	0	0	13
NNE	0	0	0	0	0	4	14	1	0	0	0	0	19
NE	0	0	0	0	0	1	4	0	0	0	0	0	5
ENE	0	0	0	0	1	2	1	2	0	0	0	0	6
E	0	0	0	0	0	0	3	0	0	0	0	0	3
ESE	0	0	0	1	0	3	13	0	0	0	0	0	17
SE	0	0	0	0	0	3	1	0	0	0	0	0	4
SSE	0	0	0	0	0	0	3	1	0	0	0	0	4
S	0	0	0	0	0	1	4	0	0	0	0	0	5
SSW	0	0	0	0	0	0	1	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	1	1	0	0	0	0	0	0	2
W	0	0	0	0	0	0	1	0	0	0	0	0	1
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1
NW	0	0	0	0	0	0	6	1	0	0	0	0	7
NNW	0	0	0	0	0	0	2	6	0	0	0	0	8
TOTAL	0	0	0	1	2	19	60	14	0	0	0	0	96

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 96
TOTAL HOURS FOR THE PERIOD: 96

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS C

FROM 10/ 1/05 0:00 TO 12/31/05 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	1	2	1	0	0	0	0	5
NNE	0	0	0	1	0	2	2	0	0	0	0	0	5
NE	0	0	0	0	0	4	2	0	0	0	0	0	6
ENE	0	0	0	0	0	1	1	1	0	0	0	0	3
E	0	0	0	0	0	2	2	0	0	0	0	0	4
ESE	0	0	0	0	0	0	5	0	0	0	0	0	5
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	1	0	1	0	0	0	0	0	2
S	0	0	0	0	0	1	10	4	0	0	0	0	15
SSW	0	0	0	0	0	1	3	1	0	0	0	0	5
SW	0	0	0	0	0	0	2	1	0	0	0	0	3
WSW	0	0	0	0	0	0	1	0	0	0	0	0	1
W	0	0	0	0	0	0	2	0	0	0	0	0	2
WNW	0	0	0	0	0	0	2	1	0	0	0	0	3
NW	0	0	0	0	0	0	3	1	0	0	0	0	4
NNW	0	0	0	0	1	0	5	1	0	0	0	0	7
TOTAL	0	0	0	2	2	12	43	11	0	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 D

FROM 10/ 1/05 0:00 TO 12/31/05 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	2	4	25	35	9	0	0	0	0	76
NNE	0	0	0	3	6	19	20	1	0	0	0	0	49
NE	0	0	0	7	4	9	8	0	0	0	0	0	28
ENE	1	0	0	3	0	8	9	9	1	0	0	0	31
E	0	0	0	4	5	2	4	0	0	0	0	0	15
ESE	0	0	0	0	2	4	9	2	0	0	0	0	17
SE	0	0	0	1	2	3	8	1	0	0	0	0	15
SSE	0	0	2	3	3	5	14	6	0	0	0	0	33
S	0	0	0	1	1	10	21	13	0	0	0	0	46
SSW	0	0	0	0	4	11	18	7	3	0	0	0	43
SW	0	0	1	1	1	5	1	2	0	0	0	0	11
WSW	0	0	0	1	6	9	3	0	0	0	0	0	19
W	0	0	0	1	5	9	6	1	0	0	0	0	22
WNW	0	0	0	2	3	3	8	3	0	0	0	0	19
NW	0	0	0	2	0	6	19	3	0	0	0	0	30
NNW	0	0	0	1	3	9	46	16	0	0	0	0	75
TOTAL	1	0	4	32	49	137	229	73	4	0	0	0	529

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 529
 TOTAL HOURS FOR THE PERIOD: 529

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS E

FROM 10/ 1/05 0:00 TO 12/31/05 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	3	26	52	4	0	0	0	0	88
NNE	0	0	0	1	1	22	52	0	0	0	0	0	76
NE	1	0	0	0	3	7	65	2	0	0	0	0	78
ENE	0	0	1	1	5	5	23	25	0	0	0	0	60
E	0	0	0	2	1	2	8	1	0	0	0	0	14
ESE	0	0	1	2	0	5	34	5	0	0	0	0	47
SE	0	0	1	0	1	9	24	1	0	0	0	0	36
SSE	0	0	0	0	3	13	15	1	0	0	0	0	32
S	0	0	1	0	4	9	21	3	0	0	0	0	38
SSW	0	0	1	1	1	9	2	0	0	0	0	0	14
SW	0	0	0	0	1	4	6	0	0	0	0	0	11
WSW	0	0	2	1	2	5	0	0	0	0	0	0	10
W	0	0	0	0	3	6	0	0	0	0	0	0	9
WNW	0	0	0	1	0	3	6	0	0	0	0	0	10
NW	0	0	1	0	1	8	2	0	0	0	0	0	12
NNW	0	0	0	0	1	2	23	1	0	0	0	0	27
TOTAL	1	0	8	12	30	135	333	43	0	0	0	0	562

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 562
 TOTAL HOURS FOR THE PERIOD: 562

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 10/ 1/05 0:00 TO 12/31/05 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	6	16	0	0	0	0	0	22
NNE	0	0	0	0	1	11	38	0	0	0	0	0	50
NE	0	0	0	0	0	6	29	3	0	0	0	0	38
ENE	0	0	0	0	2	7	15	2	0	0	0	0	26
E	0	0	0	1	0	2	2	0	0	0	0	0	5
ESE	0	0	0	0	0	1	22	0	0	0	0	0	23
SE	0	0	0	0	0	2	18	0	0	0	0	0	20
SSE	0	0	0	1	2	5	7	0	0	0	0	0	15
S	0	0	0	0	0	3	3	0	0	0	0	0	6
SSW	0	0	0	0	1	2	2	0	0	0	0	0	5
SW	0	0	0	0	0	7	5	0	0	0	0	0	12
WSW	0	0	0	0	0	0	0	0	0	0	0	0	0
W	0	0	0	0	0	3	1	0	0	0	0	0	4
WNW	0	0	0	1	0	9	6	0	0	0	0	0	16
NW	0	0	0	0	0	3	3	0	0	0	0	0	6
NNW	0	0	0	0	1	1	10	0	0	0	0	0	12
TOTAL	0	0	0	3	7	68	177	5	0	0	0	0	260

NUMBER OF CALMS: 0
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 260
 TOTAL HOURS FOR THE PERIOD: 260

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS G

FROM 10/ 1/05 0:00 TO 12/31/05 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	6	20	0	0	0	0	0	26
NNE	0	0	0	2	5	16	19	0	0	0	0	0	42
NE	0	0	0	0	4	13	33	0	0	0	0	0	50
ENE	0	0	0	0	1	5	5	0	0	0	0	0	11
E	1	0	0	1	2	11	5	0	0	0	0	0	20
ESE	0	0	1	1	2	3	17	0	0	0	0	0	24
SE	0	0	0	1	4	4	20	0	0	0	0	0	29
SSE	0	0	0	1	1	16	10	0	0	0	0	0	28
S	0	0	0	1	4	12	4	0	0	0	0	0	21
SSW	0	0	0	2	3	10	1	0	0	0	0	0	16
SW	0	1	0	2	3	0	0	0	0	0	0	0	6
WSW	0	1	0	1	0	11	3	0	0	0	0	0	16
W	0	0	1	1	0	22	14	0	0	0	0	0	38
WNW	0	0	1	0	0	25	15	0	0	0	0	0	41
NW	1	0	0	0	2	10	13	0	0	0	0	0	26
NNW	0	0	0	0	0	6	25	0	0	0	0	0	31
TOTAL	2	2	3	13	31	170	204	0	0	0	0	0	425

NUMBER OF CALMS: 1
 NUMBER OF INVALID HOURS: 0
 NUMBER OF VALID HOURS: 426
 TOTAL HOURS FOR THE PERIOD: 426

Table 7

**Effluent and Waste Disposal Annual Report 2005 Year
ATMOSPHERIC DISPERSION AND DEPOSITION RATES FOR
THE MAXIMUM INDIVIDUAL DOSE CALCULATIONS**

Analysis	Location (meters)	Ground Level Releases	Mixed Mode Releases
Gamma air dose (3) and Beta Air Dose	994 m WNW (Containment)	CHI/Q - 421.0	CHI/Q - 33.1
Maximum Receptor	994 m WNW	CHI/Q - 421.0	CHI/Q - 33.1
Resident		D/Q - 50.3	D/Q - 18.1
Garden			
Meat animal			
Immersion			
Milk animal	7,000 m WNW	CHI/Q - 3.58 D/Q - 0.38	CHI/Q - .870 D/Q - .223
Other on-site Receptors (6)	115 m ENE	CHI/Q - 5977.0 D/Q - 529.7	CHI/Q - 407.5 D/Q - 46.9
	275 m N	CHI/Q - 1644.0 D/Q - 345.6	CHI/Q - 169.1 D/Q - 68.4
	2500 SW	CHI/Q - 34.45 D/Q - 3.35	CHI/Q - 4.65 D/Q - 1.40

Notes:

- (1) All CHI/Q = 10^{-7} sec/m³
- (2) All D/Q = 10^{-9} m⁻²
- (3) Maximum offsite location (property boundary) with highest CHI/Q (unoccupied).
- (4) Maximum hypothetical occupied offsite location with highest CHI/Q and D/Q.
- (5) No milk animal within 5 miles radius, hypothetical location in worst sector.
- (6) Other on-site receptors.