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Subject: Radioactive Effluent Release Report for 2006
River Bend Station - Unit 1
License No. NPF-47
Docket No. 50-458

File Nos.: G9.5, G9.25.1.5

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RBF1-07-0072

Dear Sir or Madam,

Enclosed is a CD containing the River Bend Station (RBS) Annual Radioactive Effluent Release Report for the period January 1, 2006, through December 31, 2006. This report is submitted in accordance with the RBS Technical Specifications, Section 5.6.3. Also enclosed as the first page of the report is a copy of this transmittal letter.

Should you have any questions regarding the enclosed information, please contact Mr. Bill Fountain at (225) 381-4625.

Sincerely,

David N. Lorfing

DNL/wjf
enclosure

2006 ANNUAL EFFLUENT RELEASE REPORT

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I. INTRODUCTION

This is the annual Radioactive Effluent Release Report for the period of January 1, 2006, through December 31, 2006. 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:

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

$$= 3.17E\text{-}8 \sum_{i=1}^{n} M_i \overline{(X/Q)} Q_i \quad \begin{array}{l} \leq 5 \text{ mrads/qtr} \\ \leq 10 \text{ mrads/yr} \end{array}$$

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

$$= 3.17E\text{-}8 \sum_{i=1}^{n} N_i \overline{(X/Q)} Q_i \quad \begin{array}{l} \leq 10 \text{ mrads/qtr} \\ \leq 20 \text{ mrads/yr} \end{array}$$

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.)

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

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

$$D_\tau = \sum_{z=1}^{n} D_{I\&8DP\tau} \qquad \begin{array}{l} \leq 7.5 \text{ mrem/qtr} \\ \leq 15 \text{ mrem/yr} \end{array}$$

(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:

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

and

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

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

and

D_{TOTAL}	Total Body	$\leq$ 1.5 mrem/qtr $\leq$ 3 mrem/yr
D_{TOTAL}	Any Organ	$\leq$ 5 mrem/qtr $\leq$ 10 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 mrem to the total body or any organ (except the thyroid)

$\leq$ 75 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:

DR_{TB} = 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

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

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

(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, 2006, through December 31, 2006 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, 2006, through December 31, 2006.

E. Abnormal Releases

There were no abnormal liquid or gaseous releases during the reporting period of January 1, 2006, through December 31, 2006.

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:

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

where:

E_T = total error

$E_1, E_2 ...E_n$ = 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.

Organ	mrem
Total Body	0.85
Skin	1.52
Thyroid	1.94
Other Organ	0.89

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 2006. 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 2006 was 94 %.

VIII. RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION OPERABILITY

In the period January 1, 2006, through December 31, 2006, there was one occasion where a channel described in Table 3.3.11.2-1 of Technical Requirement 3.3.11.2 was not restored to OPERABLE within the required time. On May 21, 2006, the flow rate measurement device for the cooling tower blowdown line (CWS-FE113) was out of service for more than 30 days. The release of liquid radioactive effluents had already been suspended prior to May 21, 2006, and was not restored until after CWS-FE113 was repaired. CWS-FE113 was not repaired within 30 days due to an administrative issue. This issue has been entered into the RBS corrective action process to evaluate actions to prevent recurrence.

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, 2006, through December 31, 2006, 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, 2006,

through December 31, 2006 was less than or equal to the 10 curie limit as required by Technical Specification 5.5.8.b.

XI. RADIOLOGICAL ENVIRONMENTAL MONITORING

During the reporting period January 1, 2006, through December 31, 2006, the only change to the Radiological Environmental Monitoring Program was moving the TLD C1 location from a stub pole to a telephone pole across the street in the same vicinity due to road construction on US Highway 61. Table 4.1 of the ODCM, Direct Radiation, TC1 will be changed in a 2007 revision.

XII. LAND USE CENSUS

The land use census for the 2006 period was performed as required by Technical Requirement 3.12.2. The Land Use Census for 2006 was conducted in accordance with procedure ESP-8-051, as required by Technical Requirements Manual (TRM) (TR 3.12.2). The results of the Land Use Census will be included in the Annual Radiological Environmental Operating Report pursuant to Technical Specification 5.6.2.

A garden census is not conducted pursuant to the note in the TRM (TRCO 3.12.2) that allows the sampling of broadleaf vegetation in the highest calculated average ground-level D/Q sector near site boundary in lieu of the garden census.

The milk animal census identified no milk animals within 8 km (5 miles) of River Bend site. This information was verified by the County Agents from West Feliciana, East Feliciana and Pointe Coupee parishes.

No locations were identified in 2006 that would yield a calculated dose or dose commitment greater than those currently calculated in Requirement TSR 3.11.2.3.1.

The County Agents also confirmed that there was no commercial harvesting of crawfish within the five-mile radius downstream of RBS. This is data is collected to further support the possibility of removing invertebrates from the liquid dose conversion factors. This information represents two consecutive land use census periods that show crawfish consumption from the waters immediately affected by RBS does not occur. RBS conservatively uses the invertebrate pathway although not required by NUREG-0133 liquid dose factor methodology for fresh water nuclear power plants.

XIII. OFFSITE DOSE CALCULATION MANUAL (ODCM)

There were no changes to the ODCM in 2006.

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 2006 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, parts equivalencies or approval of alternate parts with enhanced performance characteristics, and setpoint changes. The administrative changes primarily consisted of drawing/document corrections. Equivalencies or enhanced alternate parts involved replacement valves and pump seals. The setpoint change on a pump discharge pressure setpoint was to eliminate nuisance alarms and reflect the actual operating point of the pump on its pump curve. 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 the liquid, solid or gaseous radwaste treatment systems.

XV. PROCESS CONTROL PROGRAM (PCP)

The 2006 changes to the PCP were editorial in nature. There were no changes made that affect the shipping, handling and disposal of radioactive wastes from River Bend Station. The changes are summarized on Page 1 of 11 of EN-RW-105, a copy of which is in Attachment 1 of this report.

EFFLUENT AND WASTE DISPOSAL REPORT

TABLE 1A

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

REPORT FOR 2006	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
1. Total Release	Ci	2.07E+02	4.61E+02	4.18E+02	3.68E+02	1.45E+03
2. Avg. Release Rate	uCi/sec	2.66E+01	5.86E+01	5.26E+01	4.62E+01	4.61E+01
3. % Applicable Limit	% (1)	1.57E+00	3.94E+00	7.34E+00	3.86E+00	8.35E+00
Iodine-131						
1. Total Release	Ci	4.41E-03	1.72E-02	4.35E-03	4.29E-03	3.02E-02
2. Avg. Release Rate	uCi/sec	5.68E-04	2.18E-03	5.48E-04	5.40E-04	9.59E-04
3. % Applicable Limit	% (2)	1.91E+00	7.63E+00	1.86E+00	1.88E+00	6.61E+00
Particulates Half Life >= 8 days						
1. Total Release	Ci	1.73E-03	1.55E-03	1.01E-03	1.73E-03	6.02E-03
2. Avg. Release Rate	uCi/sec	2.23E-04	1.97E-04	1.27E-04	2.18E-04	1.91E-04
3. % Applicable Limit	% (2)	2.67E-01	2.99E-01	5.14E-01	4.61E-01	7.68E-01
Tritium						
1. Total Release	Ci	1.60E+01	9.95E+00	3.23E+00	1.14E+01	4.06E+01
2. Avg. Release Rate	uCi/sec	2.06E+00	1.27E+00	4.06E-01	1.43E+00	1.29E+00
3. % Applicable Limit	% (2)	2.25E-01	2.22E-01	9.32E-02	1.68E-01	3.53E-01

1) Either the gamma air dose limit of 5 mrads/qtr or beta air dose limit of 10 mrads/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 2006	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
XE-133	Ci	2.21E+01	1.24E+01	1.57E+01	9.13E-01	5.11E+01
XE-133M	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135	Ci	8.74E+00	2.89E+01	6.62E+01	3.24E+01	1.36E+02
XE-135M	Ci	1.14E+00	7.39E-01	2.36E+01	8.20E-01	2.63E+01
Totals for Period...	Ci	3.20E+01	4.21E+01	1.05E+02	3.41E+01	2.14E+02
Iodines						
I-131	Ci	2.88E-05	3.20E-04	3.82E-06	4.83E-05	4.01E-04
I-133	Ci	1.16E-04	1.16E-04	3.88E-05	2.85E-04	5.56E-04
Totals for Period...	Ci	1.45E-04	4.36E-04	4.27E-05	3.33E-04	9.57E-04
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	7.25E-07	7.25E-07
CR-51	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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	0.00E+00	0.00E+00	0.00E+00	7.25E-07	7.25E-07
Tritium						
H-3	Ci	2.28E+00	2.76E+00	1.24E+00	1.75E+00	8.03E+00

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Totals for Period...	Ci	2.28E+00	2.76E+00	1.24E+00	1.75E+00	8.03E+00

EFFLUENT AND WASTE DISPOSAL REPORT

TABLE 1C

GASEOUS EFFLUENTS - GROUND RELEASES - BATCH MODE

REPORT FOR 2006	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 2006	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	8.11E-01	1.06E+01	8.80E+00	5.14E-01	2.07E+01
KR-87	Ci	1.03E+00	9.16E+00	0.00E+00	2.45E+00	1.26E+01
KR-88	Ci	1.58E+00	1.18E+01	0.00E+00	1.68E+00	1.50E+01
XE-131M	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133	Ci	4.12E+01	1.09E+02	3.50E+00	1.24E+01	1.66E+02
XE-133M	Ci	7.41E-01	3.23E+00	0.00E+00	0.00E+00	3.97E+00
XE-135	Ci	7.40E+01	1.46E+02	1.53E+02	1.36E+02	5.08E+02
XE-135M	Ci	4.80E+01	9.97E+01	1.48E+02	1.45E+02	4.40E+02
XE-137	Ci	4.18E+00	1.12E+01	0.00E+00	1.52E+01	3.06E+01
XE-138	Ci	3.17E+00	1.81E+01	0.00E+00	2.08E+01	4.20E+01
Totals for Period...	Ci	1.75E+02	4.19E+02	3.13E+02	3.33E+02	1.24E+03
Iodines						
I-131	Ci	4.39E-03	1.69E-02	4.35E-03	4.24E-03	2.98E-02
I-133	Ci	2.22E-02	2.28E-02	4.36E-02	3.69E-02	1.25E-01
Totals for Period...	Ci	2.66E-02	3.97E-02	4.80E-02	4.11E-02	1.55E-01
Particulates Half Life >= 8 days						
BA-140	Ci	6.73E-04	5.02E-04	3.87E-04	9.53E-04	2.51E-03
CE-139	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CE-141	Ci	0.00E+00	1.80E-06	0.00E+00	0.00E+00	1.80E-06
CO-58	Ci	0.00E+00	0.00E+00	4.12E-06	1.47E-05	1.88E-05
CO-60	Ci	0.00E+00	1.08E-05	3.83E-05	5.10E-05	1.00E-04
CR-51	Ci	0.00E+00	0.00E+00	0.00E+00	4.83E-05	4.83E-05
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	0.00E+00	4.28E-05	2.62E-05	6.90E-05
SR-89	Ci	1.04E-03	1.02E-03	5.37E-04	6.31E-04	3.24E-03
SR-90	Ci	1.53E-05	1.04E-05	4.09E-07	4.60E-06	3.07E-05
ZN-65	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period...	Ci	1.73E-03	1.55E-03	1.01E-03	1.73E-03	6.02E-03
Tritium						
H-3	Ci	1.37E+01	7.19E+00	1.99E+00	9.65E+00	3.26E+01
Totals for Period...	Ci	1.37E+01	7.19E+00	1.99E+00	9.65E+00	3.26E+01

EFFLUENT AND WASTE DISPOSAL REPORT

SUPPLEMENTAL INFORMATION

GASEOUS EFFLUENTS - BATCH MODE

Table 1E

REPORT FOR 2006	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 2006 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 H-3	1.00E-04 1.00E-06
B. Fuel Building Ventilation Exhaust Duct	M Grab Sample	M	Principal Gamma Emitters H-3	1.00E-04 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 I-133	1.00E-12 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	1.80E-01	7.50E+00	2.40E+00
Q2 - T.Spec Any Organ	CHILD	THYROID	6.11E-01	7.50E+00	8.14E+00
Q3 - T.Spec Any Organ	CHILD	THYROID	1.85E-01	7.50E+00	2.46E+00
Q4 - T.Spec Any Organ	CHILD	THYROID	1.88E-01	7.50E+00	2.50E+00
Yr - T.Spec Any Organ	CHILD	THYROID	1.16E+00	1.50E+01	7.75E+00

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

Period-Limit	Dose (mrad)	Limit (mrad)	% of Limit
Q1 - T.Spec Gamma	7.83E-02	5.00E+00	1.57E+00
Q2 - T.Spec Gamma	1.97E-01	5.00E+00	3.94E+00
Q3 - T.Spec Gamma	3.67E-01	5.00E+00	7.34E+00
Q4 - T.Spec Gamma	1.93E-01	5.00E+00	3.86E+00
Yr - T.Spec Gamma	8.35E-01	1.00E+01	8.35E+00
Q1 - T.Spec Beta	9.71E-02	1.00E+01	9.71E-01
Q2 - T.Spec Beta	2.11E-01	1.00E+01	2.11E+00
Q3 - T.Spec Beta	3.16E-01	1.00E+01	3.16E+00
Q4 - T.Spec Beta	1.90E-01	1.00E+01	1.90E+00
Yr - T.Spec Beta	8.13E-01	2.00E+01	4.07E+00

EFFLUENT AND WASTE DISPOSAL REPORT

TABLE 2A

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

REPORT FOR 2006	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
1. Total Release	Ci	2.23E-02	5.52E-03	6.67E-03	4.70E-03	3.92E-02
2. Avg. Diluted Conc.	uCi/ml	1.69E-08	4.38E-09	4.28E-09	2.97E-09	6.84E-09
3. % Applicable Limit	% (1)	4.17E-02	1.06E-02	1.90E-02	3.43E-03	9.57E-02
Tritium						
1. Total Release	Ci	1.94E+01	2.57E+01	4.07E+01	1.37E+01	1.01E+02
2. Avg. Diluted Conc.	uCi/ml	1.47E-05	2.04E-05	2.61E-05	8.67E-06	1.74E-05
3. % Applicable Limit	% (1)	1.83E-04	3.73E-04	1.15E-03	1.08E-04	1.52E-03
Dissolved and Entrained Gases						
1. Total Release	Ci	1.61E-02	5.00E-02	9.30E-02	3.40E-02	1.93E-01
2. Avg. Diluted Conc.	uCi/ml	1.22E-08	3.97E-08	5.96E-08	2.15E-08	3.36E-08
3. % Applicable Limit	% (2)	6.10E-03	1.98E-02	2.98E-02	1.08E-02	1.68E-02
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	8.29E+05	1.29E+06	3.10E+06	8.39E+05	6.06E+06
Volume of dil. water	liters	1.32E+09	1.26E+09	1.56E+09	1.58E+09	5.73E+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 2006	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 2006	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Fission and Activation Gases						
AG-110M	Ci	0.00E+00	1.06E-04	0.00E+00	0.00E+00	1.06E-04
CE-141	Ci	2.65E-04	1.29E-04	7.19E-05	1.65E-04	6.30E-04
CO-58	Ci	1.57E-04	0.00E+00	2.68E-06	2.67E-05	1.86E-04
CO-60	Ci	8.79E-03	1.36E-03	1.82E-03	9.53E-04	1.29E-02
CR-51	Ci	1.58E-03	5.74E-04	6.33E-05	8.04E-04	3.02E-03
FE-55	Ci	4.78E-03	1.79E-03	3.39E-03	0.00E+00	9.96E-03
FE-59	Ci	2.46E-04	0.00E+00	0.00E+00	5.15E-05	2.98E-04
I-131	Ci	8.59E-05	4.97E-05	0.00E+00	7.90E-05	2.15E-04
I-133	Ci	6.83E-06	0.00E+00	0.00E+00	6.57E-05	7.25E-05
LA-140	Ci	4.91E-04	4.84E-04	4.46E-04	8.75E-04	2.30E-03
MN-54	Ci	5.27E-03	7.79E-04	7.76E-04	4.45E-04	7.27E-03
MO-99	Ci	3.06E-05	0.00E+00	0.00E+00	2.40E-05	5.45E-05
NA-24	Ci	1.15E-07	0.00E+00	0.00E+00	0.00E+00	1.15E-07
NB-95	Ci	7.51E-05	3.93E-05	4.49E-06	0.00E+00	1.19E-04
NB-97	Ci	5.25E-05	0.00E+00	0.00E+00	0.00E+00	5.25E-05
NP-239	Ci	0.00E+00	1.11E-04	0.00E+00	0.00E+00	1.11E-04
RU-103	Ci	4.33E-05	0.00E+00	0.00E+00	0.00E+00	4.33E-05
SB-124	Ci	1.92E-05	0.00E+00	0.00E+00	0.00E+00	1.92E-05
SB-125	Ci	5.11E-05	0.00E+00	0.00E+00	0.00E+00	5.11E-05
SR-85	Ci	0.00E+00	0.00E+00	2.04E-06	7.17E-06	9.20E-06
SR-91	Ci	0.00E+00	0.00E+00	0.00E+00	6.44E-05	6.44E-05
SR-92	Ci	0.00E+00	4.36E-05	0.00E+00	0.00E+00	4.36E-05
TC-99M	Ci	3.54E-05	0.00E+00	0.00E+00	2.63E-05	6.17E-05
Y-92	Ci	6.27E-05	0.00E+00	9.13E-05	1.10E-03	1.25E-03
ZN-65	Ci	2.20E-04	3.04E-05	0.00E+00	2.16E-05	2.72E-04
ZR-95	Ci	2.75E-05	1.68E-05	0.00E+00	0.00E+00	4.43E-05
ZR-97	Ci	0.00E+00	1.12E-05	0.00E+00	0.00E+00	1.12E-05
		---	---	---	---	---
Totals for Period...	Ci	2.23E-02	5.52E-03	6.67E-03	4.70E-03	3.92E-02
Tritium						
H-3	Ci	1.94E+01	2.57E+01	4.07E+01	1.37E+01	1.01E+02
		---	---	---	---	---
Totals for Period...	Ci	1.94E+01	2.57E+01	4.07E+01	1.37E+01	1.01E+02
Dissolved and Entrained Gases						
XE-131M	Ci	0.00E+00	7.18E-04	0.00E+00	0.00E+00	7.18E-04
XE-133	Ci	9.01E-03	2.57E-02	3.20E-02	1.39E-02	8.06E-02
XE-133M	Ci	4.24E-04	9.89E-04	9.79E-04	5.70E-04	2.96E-03
XE-135	Ci	6.71E-03	2.26E-02	6.01E-02	1.95E-02	1.09E-01
		---	---	---	---	---
Totals for Period...	Ci	1.61E-02	5.00E-02	9.30E-02	3.40E-02	1.93E-01
Gross Alpha Radioactivity						
** No Nuclide Activities **		.....	.....	.....	.....	.....

EFFLUENT AND WASTE DISPOSAL REPORT

SUPPLEMENTAL INFORMATION

LIQUID EFFLUENTS - BATCH MODE

Table 2D

REPORT FOR 2006	Units	QTR 1	QTR 2	QTR 3	QTR 4	YEAR
Number of releases		16	23	54	15	108
Total release time	minutes	5.46E+03	8.01E+03	1.94E+04	5.48E+03	3.84E+04
Maximum release time	minutes	4.50E+02	3.90E+02	8.46E+02	3.84E+02	8.46E+02
Average release time	minutes	3.42E+02	3.48E+02	3.59E+02	3.65E+02	3.55E+02
Minimum release time	minutes	4.50E+01	3.13E+02	2.96E+02	3.44E+02	4.50E+01

		QTR 1	**QTR 2**	**QTR 3**	**QTR 4**
Average Miss. River stream flow during periods of release of effluent into a flowing stream	ft^3/sec	4.04E+05	4.07E+05	1.98E+05	4.37E+05

TABLE 2E

Effluent and Waste Disposal Annual Report 2006 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: except for Ce-144 I-131	5.00E-07 5.00E-06 1.00E-06
	P One Batch/M	M	Dissolved and Entrained Gases (Gamma Emitters)	1.00E-05
	P Each Batch	M Composite	H-3 Gross Alpha	1.00E-05 1.00E-07
	P Each Batch	Q Composite	Sr-89, Sr-90 Fe-55	5.00E-08 1.00E-06

P = Prior to each radioactive release

M = At least once per 31 days

Q = At least once per 92 days

Table 2F

LIQUID DOSE SUMMARY

Report for: 2006

Release ID: 10 All Liquid Release Points

Liquid Receptor

=== SITE DOSE LIMIT ANALYSIS ==========

Period - Limit	Age Group	Organ	Dose (mrem)	Limit (mrem)	Max % of Limit
Qtr 1 - T.Spec Any Organ	ADULT	GILLI	2.09E-03	5.00E+00	4.18E-02
Qtr 2 - T.Spec Any Organ	ADULT	GILLI	5.36E-04	5.00E+00	1.07E-02
Qtr 3 - T.Spec Any Organ	ADULT	GILLI	9.69E-04	5.00E+00	1.94E-02
Qtr 4 - T.Spec Any Organ	ADULT	GILLI	1.73E-04	5.00E+00	3.47E-03
2006 - T.Spec Any Organ	ADULT	GILLI	4.81E-03	1.00E+01	4.81E-02
Qtr 1 - T.Spec Total Body	ADULT	TBODY	1.40E-04	1.50E+00	9.34E-03
Qtr 2 - T.Spec Total Body	ADULT	TBODY	3.73E-05	1.50E+00	2.48E-03
Qtr 3 - T.Spec Total Body	ADULT	TBODY	7.87E-05	1.50E+00	5.25E-03
Qtr 4 - T.Spec Total Body	ADULT	TBODY	1.15E-05	1.50E+00	7.69E-04
2006 - T.Spec Total Body	ADULT	TBODY	3.31E-04	3.00E+00	1.10E-02

TABLE 3

Effluent and Waste Disposal Annual Report 2006 Year
Solid Waste and Irradiated Fuel Shipments
Reporting Period from 01/01/06 to 12/31/06

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

1. Type of Waste	Units	12 Month Period	Waste Class	Estimated Error %
Spent Resins, Filter Sludges, Evaporator Bottoms, etc.	m^3	7.00E+01	A	See Below
	Ci	1.28E+02	A	See Below
	m^3	3.41E+00	B	See Below
	Ci	2.65E+02	B	See Below
	m^3	0.00E+00	C	See Below
	Ci	0.00E+00	C	See Below
Dry Compressible Wastes, Contaminated Equipment, Etc.	m^3	1.09E+03	A	See Below
	Ci	3.85E+00	A	See Below
Irradiated Components, Control Rods, etc.	m^3	0.00E+00	N/A	N/A
	Ci	0.00E+00	N/A	N/A
Other (Water, EHC, Waste Oil)	m^3	7.65E+01	N/A	See Below
	Ci	5.49E-01	N/A	See Below

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-compactable / compactable 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.

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.

Effluent and Waste Disposal Annual Report 2006 Year
Solid Waste and Irradiated Fuel Shipments
Reporting Period from 01/01/06 to 12/31/06
Table 3 (continued)

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**
H-3	2.023	7.95E+00	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	2.924	1.15E+01	Mn-54	4.647	1.79E-01	Mn-54	4.692	2.58E-02
Fe-55	72.291	2.84E+02	Fe-55	83.865	3.23E+00	Fe-55	83.578	4.59E-01
Co-60	16.677	6.56+01	Co-60	9.653	3.72E-01	Co-60	9.594	5.27E-02
Zn-65	3.899	1.53E+01	Zn-65	1.387	5.34E-02	Zn-65	1.412	7.75E-03

Determined by Measurement and Correlation.
Packaged in Strong, Tight Liners.
No Solidification Agent or Absorbent Used.
No Irradiated Components, Control Rods, etc. were shipped in 2006.

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
15	Truck	Energy Solutions - Oak Ridge, TN.
13	Truck	Studsvik Processing Facility - Erwin, TN
1	Truck	Studsvik RACE - Memphis, TN.

B. No Irradiated Components, Control Rods, Etc. were shipped in 2006.

Irradiated Fuel Shipments Disposition

Number of Shipments	Mode of Transportation	Destination
0	N/A	N/A

TABLE 4

Effluent and Waste Disposal Annual Report 2006 Year

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

Error! Bookmark not defined.**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	0.00E+00(3)
RF-13 workers staying onsite	Activity Center Trailer City	994	WNW	324(4)

(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. No National Guard in 2006.

(4) Workers staying at the activity center for RF-13 refueling outage in 2006. 12 hour shifts / 12 hours in trailer April 16 through May 12th, 2006. 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 2006

Dose calc based on Durations	Critical Organ Dose Annual (mrem)	Total Body Dose Annual (mrem)	Skin Dose Annual (mrem)	Annual Duration Factor
Alligator Bayou	4.61E-05	2.21E-04	1.72E-04	4.57E-03
Lawn Service Provider	3.60E-02	1.74E-01	1.36E-01	4.11E-02
RF-13 workers staying onsite	3.48E-03	3.09E—02	3.01E-02	3.70E-02
Delivery Driver	5.25E-03	2.51E-02	1.95E-02	1.43E-02

Table 6

Effluent and Waste Disposal Annual Report 2006 Year

Meteorological Data - Joint Frequency Tables

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 1/ 1/06 0:00 TO 3/31/06 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	5	17	31	75	51	0	0	0	0	0	188
NNE	5	12	10	27	34	51	11	0	0	0	0	0	150
NE	4	14	10	24	34	60	2	0	0	0	0	0	148
ENE	4	20	23	24	15	29	7	0	0	0	0	0	122
E	2	12	24	18	15	8	0	0	0	0	0	0	79
ESE	1	14	36	57	24	22	0	0	0	0	0	0	154
SE	0	3	9	61	64	83	12	0	0	0	0	0	232
SSE	0	0	3	13	18	64	88	19	1	0	0	0	206
S	0	1	3	16	21	69	58	14	3	0	0	0	185
SSW	1	0	6	13	11	27	54	7	1	0	0	0	120
SW	1	2	3	10	5	11	9	0	0	0	0	0	41
WSW	2	6	5	10	9	25	9	0	0	0	0	0	66
W	0	9	12	6	6	16	5	0	0	0	0	0	54
WNW	0	4	21	19	10	6	12	2	0	0	0	0	74
NW	2	8	16	15	8	36	45	12	0	0	0	0	142
NNW	1	11	7	10	23	61	64	3	0	0	0	0	180
TOTAL	24	124	193	340	328	643	427	57	5	0	0	0	2141

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 18
NUMBER OF VALID HOURS: 2142
TOTAL HOURS FOR THE PERIOD: 2160

STABILITY CLASS A

FROM 1/ 1/06 0:00 TO 3/31/06 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	1	1	0	0	0	0	0	2
NE	0	0	0	0	0	4	2	0	0	0	0	0	6
ENE	0	0	0	0	0	6	0	0	0	0	0	0	6
E	0	0	0	0	1	3	0	0	0	0	0	0	4
ESE	0	0	0	0	0	3	0	0	0	0	0	0	3
SE	0	0	0	0	0	4	0	0	0	0	0	0	4
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	1	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	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	21	3	0	1	0	0	0	26

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 26
TOTAL HOURS FOR THE PERIOD: 26

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/06 0:00 TO 3/31/06 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	0	1	0	0	0	0	0	1
NE	0	0	0	0	0	3	0	0	0	0	0	0	3
ENE	0	0	0	0	0	2	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	1	1	2	0	0	0	0	0	0	4
SE	0	0	0	0	1	4	0	0	0	0	0	0	5
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	1	0	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	1	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	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	0	0	0	0	0	0	0
TOTAL	0	0	0	1	2	13	2	1	0	0	0	0	19

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

STABILITY CLASS C

FROM 1/ 1/06 0:00 TO 3/31/06 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	1	0	0	0	0	0	0	1
NE	0	0	0	0	0	3	0	0	0	0	0	0	3
ENE	0	0	0	0	2	0	0	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	1	0	0	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	2
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	2	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	1	0	0	0	0	2
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	0	2	5	4	1	1	0	0	0	14

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 14
TOTAL HOURS FOR THE PERIOD: 14

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/06 0:00 TO 3/31/06 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	4	18	52	33	0	0	0	0	0	107
NNE	0	0	2	9	19	35	9	0	0	0	0	0	74
NE	0	1	4	10	13	15	0	0	0	0	0	0	43
ENE	0	2	1	5	3	13	2	0	0	0	0	0	26
E	0	1	1	4	7	2	0	0	0	0	0	0	15
ESE	0	0	0	12	12	5	0	0	0	0	0	0	29
SE	0	0	0	9	12	42	9	0	0	0	0	0	72
SSE	0	0	1	4	5	43	61	7	1	0	0	0	122
S	0	0	0	4	8	34	17	0	1	0	0	0	64
SSW	0	0	1	8	6	12	11	0	0	0	0	0	38
SW	0	0	1	2	1	7	1	0	0	0	0	0	12
WSW	0	0	1	3	2	12	3	0	0	0	0	0	21
W	0	0	0	1	2	5	1	0	0	0	0	0	9
WNW	0	0	1	4	0	3	12	2	0	0	0	0	22
NW	0	0	1	0	0	15	24	10	0	0	0	0	50
NNW	0	0	1	0	6	35	46	3	0	0	0	0	91
TOTAL	0	4	15	79	114	330	229	22	2	0	0	0	795

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 795
TOTAL HOURS FOR THE PERIOD: 795

STABILITY CLASS E

FROM 1/ 1/06 0:00 TO 3/31/06 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	2	10	13	22	18	0	0	0	0	0	65
NNE	0	3	0	14	14	14	0	0	0	0	0	0	45
NE	1	2	5	9	15	34	0	0	0	0	0	0	66
ENE	1	2	1	7	6	8	5	0	0	0	0	0	30
E	0	1	6	5	7	2	0	0	0	0	0	0	21
ESE	0	2	17	29	11	10	0	0	0	0	0	0	69
SE	0	1	5	41	48	32	3	0	0	0	0	0	130
SSE	0	0	1	4	12	20	25	12	0	0	0	0	74
S	0	0	3	11	12	24	30	14	1	0	0	0	95
SSW	1	0	1	5	4	6	28	6	0	0	0	0	51
SW	0	0	1	6	2	1	8	0	0	0	0	0	18
WSW	0	4	4	7	4	7	5	0	0	0	0	0	31
W	0	3	8	3	4	9	2	0	0	0	0	0	29
WNW	0	1	4	7	4	2	0	0	0	0	0	0	18
NW	0	0	2	7	5	21	19	1	0	0	0	0	55
NNW	0	0	3	7	14	26	18	0	0	0	0	0	68
TOTAL	3	19	63	172	175	238	161	33	1	0	0	0	865

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 865
TOTAL HOURS FOR THE PERIOD: 865

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 1/ 1/06 0:00 TO 3/31/06 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	1	2	0	1	0	0	0	0	0	0	7
NNE	0	1	4	4	1	0	0	0	0	0	0	0	10
NE	0	2	0	4	6	1	0	0	0	0	0	0	13
ENE	0	3	1	7	4	0	0	0	0	0	0	0	15
E	1	4	4	2	0	0	0	0	0	0	0	0	11
ESE	0	8	16	14	0	1	0	0	0	0	0	0	39
SE	0	2	4	8	3	1	0	0	0	0	0	0	18
SSE	0	0	1	4	1	1	2	0	0	0	0	0	9
S	0	1	0	0	1	9	11	0	0	0	0	0	22
SSW	0	0	2	0	0	9	14	0	0	0	0	0	25
SW	1	0	1	2	2	3	0	0	0	0	0	0	9
WSW	0	0	0	0	1	6	0	0	0	0	0	0	7
W	0	1	2	2	0	2	0	0	0	0	0	0	7
WNW	0	0	6	6	4	1	0	0	0	0	0	0	17
NW	0	2	3	5	3	0	0	0	0	0	0	0	13
NNW	0	0	0	1	3	0	0	0	0	0	0	0	4
TOTAL	2	27	45	61	29	35	27	0	0	0	0	0	226

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 226
TOTAL HOURS FOR THE PERIOD: 226

STABILITY CLASS G

FROM 1/ 1/06 0:00 TO 3/31/06 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	5	2	1	0	0	0	0	0	0	0	0	9
NNE	5	8	4	0	0	0	0	0	0	0	0	0	17
NE	3	9	1	1	0	0	0	0	0	0	0	0	14
ENE	3	13	20	5	0	0	0	0	0	0	0	0	41
E	1	6	13	7	0	0	0	0	0	0	0	0	27
ESE	1	4	3	1	0	0	0	0	0	0	0	0	9
SE	0	0	0	3	0	0	0	0	0	0	0	0	3
SSE	0	0	0	1	0	0	0	0	0	0	0	0	1
S	0	0	0	1	0	1	0	0	0	0	0	0	2
SSW	0	0	1	0	1	0	1	0	0	0	0	0	3
SW	0	2	0	0	0	0	0	0	0	0	0	0	2
WSW	2	2	0	0	2	0	0	0	0	0	0	0	6
W	0	5	2	0	0	0	0	0	0	0	0	0	7
WNW	0	3	10	2	2	0	0	0	0	0	0	0	17
NW	2	6	10	3	0	0	0	0	0	0	0	0	21
NNW	1	11	3	2	0	0	0	0	0	0	0	0	17
TOTAL	19	74	69	27	5	1	1	0	0	0	0	0	196

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 197
TOTAL HOURS FOR THE PERIOD: 197

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 1/ 1/06 0:00 TO 3/31/06 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	3	38	115	11	0	0	0	0	168
NNE	0	0	1	5	8	43	95	5	0	0	0	0	157
NE	0	0	0	4	14	37	60	21	0	0	0	0	136
ENE	0	0	1	7	7	23	37	33	3	0	0	0	111
E	0	0	1	0	6	15	15	15	0	0	0	0	52
ESE	0	0	0	2	10	37	132	37	6	0	0	0	224
SE	0	0	0	2	4	23	138	19	2	0	0	0	188
SSE	0	0	1	1	2	28	110	63	18	1	0	0	224
S	0	1	0	2	8	24	116	22	11	2	0	0	186
SSW	1	0	3	0	1	16	84	25	7	1	0	0	138
SW	0	0	1	1	5	19	26	6	0	0	0	0	58
WSW	0	0	1	2	4	28	27	4	0	0	0	0	66
W	0	1	0	1	3	23	29	0	0	0	0	0	57
WNW	0	0	0	1	3	20	24	24	5	0	0	0	77
NW	0	0	0	2	2	15	79	23	13	0	0	0	134
NNW	0	0	0	1	4	20	101	36	4	0	0	0	166
TOTAL	1	2	9	32	84	409	1188	344	69	4	0	0	2142

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 18
NUMBER OF VALID HOURS: 2142
TOTAL HOURS FOR THE PERIOD: 2160

STABILITY CLASS A

FROM 1/ 1/06 0:00 TO 3/31/06 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	1	1	0	0	0	0	2
NE	0	0	0	0	0	0	3	3	0	0	0	0	6
ENE	0	0	0	0	0	0	4	2	0	0	0	0	6
E	0	0	0	0	0	1	0	3	0	0	0	0	4
ESE	0	0	0	0	0	0	2	2	2	0	0	0	6
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	1	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	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	0	1	11	11	2	1	0	0	26

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 26
TOTAL HOURS FOR THE PERIOD: 26

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 1/ 1/06 0:00 TO 3/31/06 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	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	3	0	0	0	0	0	3
ENE	0	0	0	0	0	0	1	1	0	0	0	0	2
E	0	0	0	0	0	0	2	0	0	0	0	0	2
ESE	0	0	0	0	0	1	5	2	0	0	0	0	8
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	1	0	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0	0	1	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	0	1	0	0	0	0	1
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	0	2	12	4	1	0	0	0	19

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

STABILITY CLASS C

FROM 1/ 1/06 0:00 TO 3/31/06 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	2	4	0	0	0	0	0	6
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	0	0	0	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	1	0	0	2
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	1	1	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	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0	1	1	0	0	0	2
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	3	6	3	1	1	0	0	14

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 14
TOTAL HOURS FOR THE PERIOD: 14

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 1/ 1/06 0:00 TO 3/31/06 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	20	59	10	0	0	0	0	89
NNE	0	0	0	2	6	23	52	4	0	0	0	0	87
NE	0	0	0	2	4	21	15	4	0	0	0	0	46
ENE	0	0	1	2	3	4	11	12	0	0	0	0	33
E	0	0	0	0	0	0	7	1	0	0	0	0	8
ESE	0	0	0	0	1	7	30	13	0	0	0	0	51
SE	0	0	0	0	0	3	34	12	2	0	0	0	51
SSE	0	0	1	0	1	2	60	42	8	1	0	0	115
S	0	0	0	0	1	5	49	7	0	1	0	0	63
SSW	0	0	0	0	0	3	28	6	0	0	0	0	37
SW	0	0	0	0	1	7	9	2	0	0	0	0	19
WSW	0	0	0	0	0	5	14	3	0	0	0	0	22
W	0	0	0	0	0	4	6	0	0	0	0	0	10
WNW	0	0	0	0	1	3	3	19	5	0	0	0	31
NW	0	0	0	2	0	1	18	17	9	0	0	0	47
NNW	0	0	0	1	0	6	40	35	4	0	0	0	86
TOTAL	0	0	2	9	18	114	435	187	28	2	0	0	795

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 795
TOTAL HOURS FOR THE PERIOD: 795

STABILITY CLASS E

FROM 1/ 1/06 0:00 TO 3/31/06 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	11	49	1	0	0	0	0	63
NNE	0	0	0	1	1	10	36	0	0	0	0	0	48
NE	0	0	0	2	8	11	21	13	0	0	0	0	55
ENE	0	0	0	2	1	9	12	18	3	0	0	0	45
E	0	0	0	0	3	9	3	7	0	0	0	0	22
ESE	0	0	0	2	3	23	64	16	4	0	0	0	112
SE	0	0	0	0	1	9	63	7	0	0	0	0	80
SSE	0	0	0	0	0	9	35	21	10	0	0	0	75
S	0	0	0	1	3	8	49	15	11	0	0	0	87
SSW	0	0	1	0	0	5	35	15	6	0	0	0	62
SW	0	0	0	0	2	8	14	4	0	0	0	0	28
WSW	0	0	1	1	2	11	9	0	0	0	0	0	24
W	0	0	0	0	2	15	13	0	0	0	0	0	30
WNW	0	0	0	1	0	4	11	4	0	0	0	0	20
NW	0	0	0	0	0	7	37	5	3	0	0	0	52
NNW	0	0	0	0	2	7	52	1	0	0	0	0	62
TOTAL	0	0	2	10	30	156	503	127	37	0	0	0	865

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 865
TOTAL HOURS FOR THE PERIOD: 865

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 1/ 1/06 0:00 TO 3/31/06 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	0	1	3	2	0	0	0	0	0	6
NNE	0	0	0	2	0	6	4	0	0	0	0	0	12
NE	0	0	0	0	2	1	8	1	0	0	0	0	12
ENE	0	0	0	3	2	5	4	0	0	0	0	0	14
E	0	0	0	0	1	1	1	3	0	0	0	0	6
ESE	0	0	0	0	1	1	19	2	0	0	0	0	23
SE	0	0	0	0	0	7	28	0	0	0	0	0	35
SSE	0	0	0	0	0	5	10	0	0	0	0	0	15
S	0	0	0	0	0	5	17	0	0	0	0	0	22
SSW	0	0	1	0	0	6	17	4	0	0	0	0	28
SW	0	0	0	1	2	3	2	0	0	0	0	0	8
WSW	0	0	0	0	0	7	2	0	0	0	0	0	9
W	0	1	0	1	0	0	5	0	0	0	0	0	7
WNW	0	0	0	0	0	4	6	0	0	0	0	0	10
NW	0	0	0	0	1	0	13	0	0	0	0	0	14
NNW	0	0	0	0	0	2	3	0	0	0	0	0	5
TOTAL	0	1	1	7	10	56	141	10	0	0	0	0	226

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 226
TOTAL HOURS FOR THE PERIOD: 226

STABILITY CLASS G

FROM 1/ 1/06 0:00 TO 3/31/06 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	4	5	0	0	0	0	0	10
NNE	0	0	1	0	1	4	1	0	0	0	0	0	7
NE	0	0	0	0	0	2	6	0	0	0	0	0	8
ENE	0	0	0	0	1	5	5	0	0	0	0	0	11
E	0	0	1	0	2	4	2	1	0	0	0	0	10
ESE	0	0	0	0	5	5	12	1	0	0	0	0	23
SE	0	0	0	2	3	4	12	0	0	0	0	0	21
SSE	0	0	0	1	1	12	5	0	0	0	0	0	19
S	0	1	0	1	4	5	1	0	0	0	0	0	12
SSW	1	0	1	0	1	1	4	0	0	0	0	0	8
SW	0	0	1	0	0	1	1	0	0	0	0	0	3
WSW	0	0	0	1	2	5	1	0	0	0	0	0	9
W	0	0	0	0	1	4	4	0	0	0	0	0	9
WNW	0	0	0	0	2	9	4	0	0	0	0	0	15
NW	0	0	0	0	1	7	11	0	0	0	0	0	19
NNW	0	0	0	0	2	5	6	0	0	0	0	0	13
TOTAL	1	1	4	6	26	77	80	2	0	0	0	0	197

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 197
TOTAL HOURS FOR THE PERIOD: 197

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 4/ 1/06 0:00 TO 6/30/06 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	9	18	16	51	25	41	21	0	0	0	0	0	181
NNE	17	10	22	34	30	21	0	0	0	0	0	0	134
NE	15	16	5	17	16	7	0	0	0	0	0	0	76
ENE	15	28	16	21	8	3	0	0	0	0	0	0	91
E	11	18	14	9	2	0	0	0	0	0	0	0	54
ESE	7	23	22	14	9	2	0	0	0	0	0	0	77
SE	2	17	20	45	34	17	4	0	0	0	0	0	139
SSE	3	8	8	22	32	42	15	5	0	0	0	0	135
S	1	2	11	36	51	106	51	4	0	0	0	0	262
SSW	0	11	6	34	43	71	55	0	0	0	0	0	220
SW	2	9	14	18	23	26	11	0	0	0	0	0	103
WSW	5	10	12	18	15	28	2	0	0	0	0	0	90
W	3	15	9	12	23	26	3	0	0	0	0	0	91
WNW	7	20	17	19	12	14	2	0	0	0	0	0	91
NW	11	34	7	16	16	20	10	0	0	0	0	0	114
NNW	7	22	8	24	17	39	39	0	0	0	0	0	156
TOTAL	115	261	207	390	356	463	213	9	0	0	0	0	2014

NUMBER OF CALMS: 2
NUMBER OF INVALID HOURS: 168
NUMBER OF VALID HOURS: 2016
TOTAL HOURS FOR THE PERIOD: 2184

STABILITY CLASS A

FROM 4/ 1/06 0:00 TO 6/30/06 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	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	1	0	0	0	0	0	0	1

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

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 4/ 1/06 0:00 TO 6/30/06 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	2	0	0	0	0	0	0	2
NE	0	0	0	0	0	2	0	0	0	0	0	0	2
ENE	0	0	0	0	1	0	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	1	0	0	0	0	0	1
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	0	0	0	0	0	0	0	1
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	2	4	1	0	0	0	0	0	7

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

STABILITY CLASS C

FROM 4/ 1/06 0:00 TO 6/30/06 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	1	0	0	0	0	0	0	1
NE	0	0	0	0	1	1	0	0	0	0	0	0	2
ENE	0	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	1
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	1	3	1	0	0	0	0	0	5

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

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 4/ 1/06 0:00 TO 6/30/06 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	4	6	11	9	0	0	0	0	0	30
NNE	0	1	0	6	6	13	0	0	0	0	0	0	26
NE	0	0	0	1	2	4	0	0	0	0	0	0	7
ENE	0	1	1	7	5	0	0	0	0	0	0	0	14
E	0	0	1	3	1	0	0	0	0	0	0	0	5
ESE	0	0	0	5	2	0	0	0	0	0	0	0	7
SE	0	1	0	7	1	6	4	0	0	0	0	0	19
SSE	0	0	1	3	6	11	2	4	0	0	0	0	27
S	0	0	0	4	15	20	4	0	0	0	0	0	43
SSW	0	1	0	11	14	14	6	0	0	0	0	0	46
SW	0	2	1	5	2	0	1	0	0	0	0	0	11
WSW	0	0	1	1	4	1	0	0	0	0	0	0	7
W	0	1	1	2	2	2	1	0	0	0	0	0	9
WNW	0	0	0	3	3	2	1	0	0	0	0	0	9
NW	0	0	0	1	3	10	8	0	0	0	0	0	22
NNW	0	0	0	1	6	8	35	0	0	0	0	0	50
TOTAL	0	7	6	64	78	102	71	4	0	0	0	0	332

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 332
TOTAL HOURS FOR THE PERIOD: 332

STABILITY CLASS E

FROM 4/ 1/06 0:00 TO 6/30/06 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	3	24	14	26	12	0	0	0	0	0	82
NNE	0	0	10	12	20	5	0	0	0	0	0	0	47
NE	1	7	2	16	10	0	0	0	0	0	0	0	36
ENE	0	7	8	12	1	1	0	0	0	0	0	0	29
E	1	7	8	5	1	0	0	0	0	0	0	0	22
ESE	1	12	15	8	3	2	0	0	0	0	0	0	41
SE	1	10	15	33	25	9	0	0	0	0	0	0	93
SSE	1	4	7	12	16	14	12	1	0	0	0	0	67
S	1	1	9	30	26	33	31	4	0	0	0	0	135
SSW	0	3	4	21	22	18	34	0	0	0	0	0	102
SW	1	3	8	9	4	10	10	0	0	0	0	0	45
WSW	2	7	6	9	3	16	2	0	0	0	0	0	45
W	0	2	3	6	10	19	2	0	0	0	0	0	42
WNW	0	3	7	12	6	8	1	0	0	0	0	0	37
NW	1	5	1	8	11	6	1	0	0	0	0	0	33
NNW	1	2	3	10	4	24	4	0	0	0	0	0	48
TOTAL	11	76	109	227	176	191	109	5	0	0	0	0	904

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 904
TOTAL HOURS FOR THE PERIOD: 904

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 4/ 1/06 0:00 TO 6/30/06 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	6	4	9	10	4	4	0	0	0	0	0	0	37
NNE	6	3	5	14	4	0	0	0	0	0	0	0	32
NE	3	3	3	0	3	0	0	0	0	0	0	0	12
ENE	5	8	6	2	1	0	0	0	0	0	0	0	22
E	4	7	4	1	0	0	0	0	0	0	0	0	16
ESE	4	10	6	1	3	0	0	0	0	0	0	0	24
SE	1	5	4	3	7	2	0	0	0	0	0	0	22
SSE	1	3	0	7	10	15	0	0	0	0	0	0	36
S	0	0	1	2	9	47	16	0	0	0	0	0	75
SSW	0	5	2	2	5	35	15	0	0	0	0	0	64
SW	1	4	4	2	13	12	0	0	0	0	0	0	36
WSW	1	2	4	6	7	11	0	0	0	0	0	0	31
W	0	8	3	4	11	5	0	0	0	0	0	0	31
WNW	5	7	7	3	3	4	0	0	0	0	0	0	29
NW	6	7	4	6	2	4	0	0	0	0	0	0	29
NNW	2	7	2	11	6	7	0	0	0	0	0	0	35
TOTAL	45	83	64	74	88	146	31	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

STABILITY CLASS G

FROM 4/ 1/06 0:00 TO 6/30/06 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	11	4	13	1	0	0	0	0	0	0	0	32
NNE	11	6	7	2	0	0	0	0	0	0	0	0	26
NE	11	6	0	0	0	0	0	0	0	0	0	0	17
ENE	10	12	1	0	0	0	0	0	0	0	0	0	23
E	6	4	1	0	0	0	0	0	0	0	0	0	11
ESE	2	1	1	0	1	0	0	0	0	0	0	0	5
SE	0	1	1	2	1	0	0	0	0	0	0	0	5
SSE	1	1	0	0	0	2	0	0	0	0	0	0	4
S	0	1	1	0	1	6	0	0	0	0	0	0	9
SSW	0	2	0	0	2	4	0	0	0	0	0	0	8
SW	0	0	1	2	3	4	0	0	0	0	0	0	10
WSW	2	1	1	2	1	0	0	0	0	0	0	0	7
W	3	4	2	0	0	0	0	0	0	0	0	0	9
WNW	2	10	3	1	0	0	0	0	0	0	0	0	16
NW	4	22	2	1	0	0	0	0	0	0	0	0	29
NNW	4	13	3	2	1	0	0	0	0	0	0	0	23
TOTAL	59	95	28	25	11	16	0	0	0	0	0	0	234

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 235
TOTAL HOURS FOR THE PERIOD: 235

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 4/ 1/06 0:00 TO 6/30/06 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	4	6	35	75	3	0	0	0	0	124
NNE	0	0	1	6	10	52	58	0	0	0	0	0	127
NE	1	1	1	3	2	24	75	2	0	0	0	0	109
ENE	0	0	1	6	13	30	35	3	0	0	0	0	88
E	0	0	2	10	16	29	9	0	0	0	0	0	66
ESE	0	0	0	2	13	56	42	4	0	0	0	0	117
SE	0	0	0	5	13	50	51	6	6	1	0	0	132
SSE	0	1	1	5	13	49	56	6	0	0	0	0	131
S	0	0	0	5	22	83	147	17	1	0	0	0	275
SSW	0	0	1	5	22	76	134	24	1	0	0	0	263
SW	0	0	1	4	17	57	33	4	0	0	0	0	116
WSW	0	0	1	8	20	51	29	0	0	0	0	0	109
W	0	0	0	6	12	42	27	0	0	0	0	0	87
WNW	0	0	0	4	7	36	13	1	0	0	0	0	61
NW	0	1	1	6	11	39	27	9	0	0	0	0	94
NNW	0	0	1	8	6	35	53	14	0	0	0	0	117
TOTAL	1	3	12	87	203	744	864	93	8	1	0	0	2016

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 168
NUMBER OF VALID HOURS: 2016
TOTAL HOURS FOR THE PERIOD: 2184

STABILITY CLASS A

FROM 4/ 1/06 0:00 TO 6/30/06 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	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	1	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	1	0	0	0	0	0	1

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

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 4/ 1/06 0:00 TO 6/30/06 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	4	0	0	0	0	0	4
ENE	0	0	0	0	0	0	1	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	1	0	0	0	0	1
SSE	0	0	0	0	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	0	0	0	0	0	0	1
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	0	1	5	1	0	0	0	0	7

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

STABILITY CLASS C

FROM 4/ 1/06 0:00 TO 6/30/06 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	1	2	0	0	0	0	3
ENE	0	0	0	0	0	0	0	1	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	1
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	1	4	0	0	0	0	5

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

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 4/ 1/06 0:00 TO 6/30/06 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	4	11	1	0	0	0	0	17
NNE	0	0	0	2	0	5	9	0	0	0	0	0	16
NE	0	0	0	0	1	3	21	0	0	0	0	0	25
ENE	0	0	0	0	1	9	5	1	0	0	0	0	16
E	0	0	0	2	0	2	4	0	0	0	0	0	8
ESE	0	0	0	0	0	6	6	1	0	0	0	0	13
SE	0	0	0	0	1	4	1	4	4	1	0	0	15
SSE	0	0	0	0	0	1	10	1	0	0	0	0	12
S	0	0	0	0	1	6	37	1	0	0	0	0	45
SSW	0	0	0	0	2	8	31	6	0	0	0	0	47
SW	0	0	0	0	1	9	4	0	0	0	0	0	14
WSW	0	0	0	0	1	8	3	0	0	0	0	0	12
W	0	0	0	0	0	4	4	0	0	0	0	0	8
WNW	0	0	0	0	0	3	8	1	0	0	0	0	12
NW	0	0	0	0	2	2	14	7	0	0	0	0	25
NNW	0	0	0	0	1	7	26	13	0	0	0	0	47
TOTAL	0	0	0	5	11	81	194	36	4	1	0	0	332

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 332
TOTAL HOURS FOR THE PERIOD: 332

STABILITY CLASS E

FROM 4/ 1/06 0:00 TO 6/30/06 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	4	23	44	2	0	0	0	0	73
NNE	0	0	0	1	4	30	25	0	0	0	0	0	60
NE	0	0	1	3	1	12	15	0	0	0	0	0	32
ENE	0	0	0	3	7	13	18	0	0	0	0	0	41
E	0	0	0	4	2	14	4	0	0	0	0	0	24
ESE	0	0	0	1	5	32	26	3	0	0	0	0	67
SE	0	0	0	2	6	22	35	1	2	0	0	0	68
SSE	0	0	0	2	5	19	28	4	0	0	0	0	58
S	0	0	0	0	9	35	65	14	1	0	0	0	124
SSW	0	0	0	1	9	36	66	18	1	0	0	0	131
SW	0	0	0	2	0	22	21	4	0	0	0	0	49
WSW	0	0	0	3	6	14	21	0	0	0	0	0	44
W	0	0	0	0	6	16	21	0	0	0	0	0	43
WNW	0	0	0	2	3	15	3	0	0	0	0	0	23
NW	0	0	0	1	5	17	6	1	0	0	0	0	30
NNW	0	0	0	1	0	16	19	1	0	0	0	0	37
TOTAL	0	0	1	26	72	336	417	48	4	0	0	0	904

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 904
TOTAL HOURS FOR THE PERIOD: 904

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 4/ 1/06 0:00 TO 6/30/06 23:00
PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22-.50	.51-.75	.76-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-5.0	5.1-7.0	7.1-10.0	10.1-13.0	13.1-18.0	>18	TOT.
N	0	0	1	1	1	7	11	0	0	0	0	0	21
NNE	0	0	0	0	3	10	11	0	0	0	0	0	24
NE	0	0	0	0	0	4	20	0	0	0	0	0	24
ENE	0	0	0	2	3	5	8	1	0	0	0	0	19
E	0	0	0	3	8	8	0	0	0	0	0	0	19
ESE	0	0	0	0	5	15	9	0	0	0	0	0	29
SE	0	0	0	2	4	23	12	0	0	0	0	0	41
SSE	0	0	1	1	5	21	16	1	0	0	0	0	45
S	0	0	0	1	7	29	45	2	0	0	0	0	84
SSW	0	0	1	2	7	26	33	0	0	0	0	0	69
SW	0	0	0	1	11	20	7	0	0	0	0	0	39
WSW	0	0	1	5	10	18	5	0	0	0	0	0	39
W	0	0	0	4	5	12	2	0	0	0	0	0	23
WNW	0	0	0	2	2	8	2	0	0	0	0	0	14
NW	0	1	1	4	2	12	2	0	0	0	0	0	22
NNW	0	0	1	3	4	9	3	0	0	0	0	0	20
TOTAL	0	1	6	31	77	227	186	4	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

STABILITY CLASS G

FROM 4/ 1/06 0:00 TO 6/30/06 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	2	1	1	9	0	0	0	0	0	13
NNE	0	0	1	3	3	7	13	0	0	0	0	0	27
NE	1	1	0	0	0	5	14	0	0	0	0	0	21
ENE	0	0	1	1	2	3	2	0	0	0	0	0	9
E	0	0	2	1	6	5	1	0	0	0	0	0	15
ESE	0	0	0	1	3	3	1	0	0	0	0	0	8
SE	0	0	0	1	2	1	3	0	0	0	0	0	7
SSE	0	1	0	2	3	8	2	0	0	0	0	0	16
S	0	0	0	4	5	13	0	0	0	0	0	0	22
SSW	0	0	0	2	4	6	4	0	0	0	0	0	16
SW	0	0	1	1	5	5	1	0	0	0	0	0	13
WSW	0	0	0	0	3	11	0	0	0	0	0	0	14
W	0	0	0	2	1	10	0	0	0	0	0	0	13
WNW	0	0	0	0	2	10	0	0	0	0	0	0	12
NW	0	0	0	1	2	8	5	0	0	0	0	0	16
NNW	0	0	0	4	1	3	5	0	0	0	0	0	13
TOTAL	1	2	5	25	43	99	60	0	0	0	0	0	235

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 235
TOTAL HOURS FOR THE PERIOD: 235

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 7/ 1/06 0:00 TO 9/30/06 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	20	22	25	31	18	31	6	0	0	0	0	0	153
NNE	15	22	8	44	30	14	1	0	0	0	0	0	134
NE	27	20	19	43	9	1	1	0	0	0	0	0	120
ENE	16	24	20	20	8	3	0	0	0	0	0	0	91
E	2	26	14	20	7	1	0	0	0	0	0	0	70
ESE	1	25	24	15	7	10	0	0	0	0	0	0	82
SE	4	20	39	44	26	14	0	0	0	0	0	0	147
SSE	1	18	18	42	45	36	4	0	0	0	0	0	164
S	4	8	13	30	34	64	18	0	0	0	0	0	171
SSW	2	12	13	31	33	39	4	0	0	0	0	0	134
SW	0	10	20	32	22	22	0	0	0	0	0	0	106
WSW	5	23	20	15	38	32	2	0	0	0	0	0	135
W	3	20	14	12	28	33	1	0	0	0	0	0	111
WNW	10	36	16	21	18	17	3	0	0	0	0	0	121
NW	11	42	15	25	11	23	2	0	0	1	0	0	130
NNW	12	31	18	36	31	50	10	0	0	0	0	0	188
TOTAL	133	359	296	461	365	390	52	0	0	1	0	0	2057

NUMBER OF CALMS: 2
NUMBER OF INVALID HOURS: 149
NUMBER OF VALID HOURS: 2059
TOTAL HOURS FOR THE PERIOD: 2208

STABILITY CLASS A

FROM 7/ 1/06 0:00 TO 9/30/06 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	6	4	0	0	0	0	0	10
NNE	0	0	0	0	1	3	1	0	0	0	0	0	5
NE	0	0	0	0	0	0	1	0	0	0	0	0	1
ENE	0	0	0	1	4	2	0	0	0	0	0	0	7
E	0	0	0	2	1	1	0	0	0	0	0	0	4
ESE	0	0	0	0	1	7	0	0	0	0	0	0	8
SE	0	0	0	0	0	2	0	0	0	0	0	0	2
SSE	0	0	0	0	0	3	0	0	0	0	0	0	3
S	0	0	0	0	0	3	0	0	0	0	0	0	3
SSW	0	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	3	0	0	0	0	0	0	3
WSW	0	0	0	1	2	8	1	0	0	0	0	0	12
W	0	0	0	0	1	8	1	0	0	0	0	0	10
WNW	0	0	0	0	1	1	3	0	0	0	0	0	5
NW	0	0	0	0	0	3	1	0	0	0	0	0	4
NNW	0	0	0	0	0	7	4	0	0	0	0	0	11
TOTAL	0	0	0	4	11	57	16	0	0	0	0	0	88

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 88
TOTAL HOURS FOR THE PERIOD: 88

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 7/ 1/06 0:00 TO 9/30/06 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	7	0	0	0	0	0	0	8
NNE	0	0	0	0	2	1	0	0	0	0	0	0	3
NE	0	0	0	1	0	0	0	0	0	0	0	0	1
ENE	0	0	0	0	1	0	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	1	0	0	0	0	0	0	0	0	1
SE	0	0	0	0	2	2	0	0	0	0	0	0	4
SSE	0	0	0	0	0	1	0	0	0	0	0	0	1
S	0	0	0	0	1	4	1	0	0	0	0	0	6
SSW	0	0	0	0	1	2	0	0	0	0	0	0	3
SW	0	0	0	2	0	2	0	0	0	0	0	0	4
WSW	0	0	0	0	4	3	0	0	0	0	0	0	7
W	0	0	0	0	1	5	0	0	0	0	0	0	6
WNW	0	0	0	0	1	2	0	0	0	0	0	0	3
NW	0	0	0	0	0	3	1	0	0	0	0	0	4
NNW	0	0	0	0	0	11	4	0	0	0	0	0	15
TOTAL	0	0	0	4	14	43	6	0	0	0	0	0	67

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 67
TOTAL HOURS FOR THE PERIOD: 67

STABILITY CLASS C

FROM 7/ 1/06 0:00 TO 9/30/06 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	4	0	0	0	0	0	0	4
NNE	0	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	1	0	0	0	0	0	0	0	1
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	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	1	0	0	0	0	0	0	1
SSE	0	0	0	0	0	1	0	0	0	0	0	0	1
S	0	0	0	0	0	2	0	0	0	0	0	0	2
SSW	0	0	0	0	1	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	1	1	0	0	0	0	0	0	2
W	0	0	0	0	0	0	0	0	0	0	0	0	0
WNW	0	0	0	0	1	0	0	0	0	0	0	0	1
NW	0	0	0	0	0	3	0	0	0	0	0	0	3
NNW	0	0	0	0	0	4	0	0	0	0	0	0	4
TOTAL	0	0	0	0	4	16	0	0	0	0	0	0	20

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 20
TOTAL HOURS FOR THE PERIOD: 20

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 7/ 1/06 0:00 TO 9/30/06 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	4	3	9	2	0	0	0	0	0	21
NNE	0	1	0	6	8	3	0	0	0	0	0	0	18
NE	0	0	0	5	5	0	0	0	0	0	0	0	10
ENE	0	0	0	8	3	1	0	0	0	0	0	0	12
E	0	0	0	10	3	0	0	0	0	0	0	0	13
ESE	0	0	1	3	5	3	0	0	0	0	0	0	12
SE	0	0	1	7	7	4	0	0	0	0	0	0	19
SSE	0	1	1	7	13	13	2	0	0	0	0	0	37
S	0	0	4	2	7	22	6	0	0	0	0	0	41
SSW	0	2	0	0	10	10	3	0	0	0	0	0	25
SW	0	0	0	6	10	5	0	0	0	0	0	0	21
WSW	0	0	1	3	11	10	1	0	0	0	0	0	26
W	0	1	1	3	7	11	0	0	0	0	0	0	23
WNW	0	0	1	6	8	10	0	0	0	0	0	0	25
NW	0	0	1	4	4	12	0	0	0	0	0	0	21
NNW	0	1	2	4	9	23	2	0	0	0	0	0	41
TOTAL	0	6	16	78	113	136	16	0	0	0	0	0	365

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 365
TOTAL HOURS FOR THE PERIOD: 365

STABILITY CLASS E

FROM 7/ 1/06 0:00 TO 9/30/06 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	7	12	10	11	4	0	0	0	0	0	0	45
NNE	1	4	4	21	18	5	0	0	0	0	0	0	53
NE	8	4	14	28	2	1	0	0	0	0	0	0	57
ENE	1	10	17	8	0	0	0	0	0	0	0	0	36
E	1	21	11	8	3	0	0	0	0	0	0	0	44
ESE	1	18	17	8	1	0	0	0	0	0	0	0	45
SE	2	13	31	30	14	4	0	0	0	0	0	0	94
SSE	0	11	15	28	17	9	2	0	0	0	0	0	82
S	3	5	7	21	16	20	11	0	0	0	0	0	83
SSW	2	5	10	21	11	14	1	0	0	0	0	0	64
SW	0	6	13	15	9	6	0	0	0	0	0	0	49
WSW	2	9	11	8	13	9	0	0	0	0	0	0	52
W	1	4	5	7	16	8	0	0	0	0	0	0	41
WNW	1	5	6	9	5	4	0	0	0	0	0	0	30
NW	2	6	5	14	6	2	0	0	0	0	0	0	35
NNW	1	5	5	18	18	5	0	0	0	0	0	0	52
TOTAL	27	133	183	254	160	91	14	0	0	0	0	0	862

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 863
TOTAL HOURS FOR THE PERIOD: 863

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 7/ 1/06 0:00 TO 9/30/06 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	11	10	7	10	3	1	0	0	0	0	0	0	42
NNE	7	14	3	17	1	1	0	0	0	0	0	0	43
NE	8	8	4	9	1	0	0	0	0	0	0	0	30
ENE	13	11	2	2	0	0	0	0	0	0	0	0	28
E	1	5	2	0	0	0	0	0	0	0	0	0	8
ESE	0	6	6	3	0	0	0	0	0	0	0	0	15
SE	2	6	6	5	3	1	0	0	0	0	0	0	23
SSE	1	3	1	6	12	9	0	0	0	0	0	0	32
S	1	2	2	7	10	8	0	0	0	0	0	0	30
SSW	0	3	2	6	8	10	0	0	0	0	0	0	29
SW	0	2	6	8	3	5	0	0	0	0	0	0	24
WSW	3	12	8	2	7	1	0	0	0	0	0	0	33
W	2	10	5	1	2	1	0	0	0	0	0	0	21
WNW	6	20	6	3	2	0	0	0	0	0	0	0	37
NW	5	19	4	7	1	0	0	0	0	0	0	0	36
NNW	5	6	4	11	4	0	0	0	0	0	0	0	30
TOTAL	65	137	68	97	57	37	0	0	0	0	0	0	461

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 462
TOTAL HOURS FOR THE PERIOD: 462

STABILITY CLASS G

FROM 7/ 1/06 0:00 TO 9/30/06 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	5	3	7	0	0	0	0	0	0	0	0	23
NNE	7	3	1	0	0	1	0	0	0	0	0	0	12
NE	11	8	1	0	0	0	0	0	0	0	0	0	20
ENE	2	3	1	1	0	0	0	0	0	0	0	0	7
E	0	0	1	0	0	0	0	0	0	0	0	0	1
ESE	0	1	0	0	0	0	0	0	0	0	0	0	1
SE	0	1	1	2	0	0	0	0	0	0	0	0	4
SSE	0	3	1	1	3	0	0	0	0	0	0	0	8
S	0	1	0	0	0	5	0	0	0	0	0	0	6
SSW	0	2	1	4	2	3	0	0	0	0	0	0	12
SW	0	2	1	1	0	1	0	0	0	0	0	0	5
WSW	0	2	0	1	0	0	0	0	0	0	0	0	3
W	0	5	3	1	1	0	0	0	0	0	0	0	10
WNW	3	11	3	3	0	0	0	0	0	0	0	0	20
NW	4	17	5	0	0	0	0	0	0	1	0	0	27
NNW	6	19	7	3	0	0	0	0	0	0	0	0	35
TOTAL	41	83	29	24	6	10	0	0	0	1	0	0	194

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 11
NUMBER OF VALID HOURS: 194
TOTAL HOURS FOR THE PERIOD: 205

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 7/ 1/06 0:00 TO 9/30/06 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	1	4	8	12	27	53	1	0	0	0	0	107
NNE	0	0	3	7	9	25	39	0	0	0	0	0	83
NE	0	2	6	10	15	36	57	1	0	0	0	0	127
ENE	0	0	3	11	26	43	34	3	0	0	0	0	120
E	0	2	5	22	26	20	16	1	0	0	0	0	92
ESE	0	1	7	16	29	71	48	3	0	0	0	0	175
SE	1	0	6	18	26	72	47	2	0	0	0	0	172
SSE	0	1	2	14	35	68	35	4	0	0	0	0	159
S	0	1	2	16	22	82	55	4	0	0	0	0	182
SSW	0	2	2	11	26	83	30	1	0	0	0	0	155
SW	0	0	1	9	31	70	10	0	0	0	0	0	121
WSW	0	0	2	10	29	82	16	1	0	0	0	0	140
W	0	1	0	15	32	77	11	0	0	0	0	0	136
WNW	0	0	4	10	15	38	13	0	0	0	0	0	80
NW	0	1	2	9	14	36	27	0	0	0	1	0	90
NNW	0	0	1	8	13	40	57	1	0	0	0	0	120
TOTAL	2	12	50	194	360	870	548	22	0	0	1	0	2059

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 149
NUMBER OF VALID HOURS: 2059
TOTAL HOURS FOR THE PERIOD: 2208

STABILITY CLASS A

FROM 7/ 1/06 0:00 TO 9/30/06 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	6	0	0	0	0	0	8
NNE	0	0	0	0	0	0	4	0	0	0	0	0	4
NE	0	0	0	0	0	1	3	1	0	0	0	0	5
ENE	0	0	0	0	0	2	5	0	0	0	0	0	7
E	0	0	0	0	1	1	8	0	0	0	0	0	10
ESE	0	0	0	0	0	1	1	0	0	0	0	0	2
SE	0	0	0	0	0	1	1	0	0	0	0	0	2
SSE	0	0	0	0	0	3	2	0	0	0	0	0	5
S	0	0	0	0	0	0	1	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	1	0	0	0	0	0	1
WSW	0	0	0	0	0	7	7	0	0	0	0	0	14
W	0	0	0	0	0	7	4	0	0	0	0	0	11
WNW	0	0	0	0	0	0	4	0	0	0	0	0	4
NW	0	0	0	0	0	2	5	0	0	0	0	0	7
NNW	0	0	0	0	0	1	6	0	0	0	0	0	7
TOTAL	0	0	0	0	1	28	58	1	0	0	0	0	88

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 88
TOTAL HOURS FOR THE PERIOD: 88

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 7/ 1/06 0:00 TO 9/30/06 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	6	0	0	0	0	0	8
NNE	0	0	0	0	0	2	1	0	0	0	0	0	3
NE	0	0	0	0	0	1	1	0	0	0	0	0	2
ENE	0	0	0	0	0	0	1	0	0	0	0	0	1
E	0	0	0	0	0	1	1	0	0	0	0	0	2
ESE	0	0	0	0	1	0	1	0	0	0	0	0	2
SE	0	0	0	0	0	2	1	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	0	5	0	0	0	0	0	5
SSW	0	0	0	0	0	1	1	0	0	0	0	0	2
SW	0	0	0	0	0	2	1	0	0	0	0	0	3
WSW	0	0	0	0	0	5	2	0	0	0	0	0	7
W	0	0	0	0	0	6	1	0	0	0	0	0	7
WNW	0	0	0	0	0	1	2	0	0	0	0	0	3
NW	0	0	0	0	0	1	5	0	0	0	0	0	6
NNW	0	0	0	0	0	1	10	1	0	0	0	0	12
TOTAL	0	0	0	0	1	25	40	1	0	0	0	0	67

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 67
TOTAL HOURS FOR THE PERIOD: 67

STABILITY CLASS C

FROM 7/ 1/06 0:00 TO 9/30/06 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	0	0	0	0	0	0	1
NE	0	0	0	0	0	1	0	0	0	0	0	0	1
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	0	0	0	1	0	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	1	0	0	0	0	0	1
S	0	0	0	0	0	0	2	0	0	0	0	0	2
SSW	0	0	0	0	0	1	0	0	0	0	0	0	1
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	0	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	0	1	0	0	0	0	0	1
NW	0	0	0	0	0	0	3	0	0	0	0	0	3
NNW	0	0	0	0	0	1	2	0	0	0	0	0	3
TOTAL	0	0	0	0	0	7	13	0	0	0	0	0	20

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 20
TOTAL HOURS FOR THE PERIOD: 20

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 7/ 1/06 0:00 TO 9/30/06 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	4	5	10	1	0	0	0	0	21
NNE	0	0	0	3	2	4	2	0	0	0	0	0	11
NE	0	0	1	2	1	8	4	0	0	0	0	0	16
ENE	0	0	0	1	0	10	18	0	0	0	0	0	29
E	0	0	0	0	2	2	6	0	0	0	0	0	10
ESE	0	0	0	0	0	11	8	1	0	0	0	0	20
SE	0	0	0	1	2	6	7	1	0	0	0	0	17
SSE	0	0	0	0	4	8	15	1	0	0	0	0	28
S	0	0	1	2	1	18	16	2	0	0	0	0	40
SSW	0	0	0	1	1	13	9	1	0	0	0	0	25
SW	0	0	0	0	4	18	4	0	0	0	0	0	26
WSW	0	0	0	0	3	13	2	1	0	0	0	0	19
W	0	0	0	2	3	22	4	0	0	0	0	0	31
WNW	0	0	0	0	2	13	3	0	0	0	0	0	18
NW	0	0	0	3	4	11	9	0	0	0	0	0	27
NNW	0	0	0	0	3	10	14	0	0	0	0	0	27
TOTAL	0	0	2	16	36	172	131	8	0	0	0	0	365

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 365
TOTAL HOURS FOR THE PERIOD: 365

STABILITY CLASS E

FROM 7/ 1/06 0:00 TO 9/30/06 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	1	6	13	9	0	0	0	0	0	31
NNE	0	0	1	3	3	10	24	0	0	0	0	0	41
NE	0	0	2	6	6	18	31	0	0	0	0	0	63
ENE	0	0	2	6	18	24	8	2	0	0	0	0	60
E	0	0	2	10	16	14	0	1	0	0	0	0	43
ESE	0	0	2	11	15	34	28	2	0	0	0	0	92
SE	0	0	2	10	10	37	32	1	0	0	0	0	92
SSE	0	0	1	7	14	33	12	3	0	0	0	0	70
S	0	0	1	6	9	38	26	2	0	0	0	0	82
SSW	0	1	1	3	13	35	14	0	0	0	0	0	67
SW	0	0	0	4	10	29	4	0	0	0	0	0	47
WSW	0	0	0	1	5	35	4	0	0	0	0	0	45
W	0	0	0	2	14	26	2	0	0	0	0	0	44
WNW	0	0	1	3	6	13	2	0	0	0	0	0	25
NW	0	0	0	2	5	14	4	0	0	0	0	0	25
NNW	0	0	0	4	5	16	11	0	0	0	0	0	36
TOTAL	0	2	16	79	155	389	211	11	0	0	0	0	863

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 863
TOTAL HOURS FOR THE PERIOD: 863

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 7/ 1/06 0:00 TO 9/30/06 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	2	4	1	2	13	0	0	0	0	0	22
NNE	0	0	0	1	3	4	7	0	0	0	0	0	15
NE	0	2	3	2	7	5	15	0	0	0	0	0	34
ENE	0	0	0	2	6	6	2	1	0	0	0	0	17
E	0	0	2	10	6	0	1	0	0	0	0	0	19
ESE	0	1	4	5	12	21	9	0	0	0	0	0	52
SE	0	0	1	6	12	24	4	0	0	0	0	0	47
SSE	0	1	0	5	15	16	4	0	0	0	0	0	41
S	0	0	0	4	9	18	5	0	0	0	0	0	36
SSW	0	1	0	7	6	22	6	0	0	0	0	0	42
SW	0	0	1	3	8	13	0	0	0	0	0	0	25
WSW	0	0	1	4	16	14	1	0	0	0	0	0	36
W	0	1	0	5	7	10	0	0	0	0	0	0	23
WNW	0	0	2	5	5	10	1	0	0	0	0	0	23
NW	0	1	1	3	3	5	0	0	0	0	0	0	13
NNW	0	0	0	2	2	8	5	0	0	0	0	0	17
TOTAL	0	7	17	68	118	178	73	1	0	0	0	0	462

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 462
TOTAL HOURS FOR THE PERIOD: 462

STABILITY CLASS G

FROM 7/ 1/06 0:00 TO 9/30/06 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	2	1	3	6	0	0	0	0	0	14
NNE	0	0	2	0	1	4	1	0	0	0	0	0	8
NE	0	0	0	0	1	2	3	0	0	0	0	0	6
ENE	0	0	1	2	2	1	0	0	0	0	0	0	6
E	0	2	1	2	1	2	0	0	0	0	0	0	8
ESE	0	0	1	0	1	4	0	0	0	0	0	0	6
SE	1	0	3	1	2	2	2	0	0	0	0	0	11
SSE	0	0	1	2	2	8	0	0	0	0	0	0	13
S	0	1	0	4	3	8	0	0	0	0	0	0	16
SSW	0	0	1	0	6	11	0	0	0	0	0	0	18
SW	0	0	0	2	9	8	0	0	0	0	0	0	19
WSW	0	0	1	5	5	6	0	0	0	0	0	0	17
W	0	0	0	6	8	5	0	0	0	0	0	0	19
WNW	0	0	1	2	2	1	0	0	0	0	0	0	6
NW	0	0	1	1	2	3	1	0	0	0	1	0	9
NNW	0	0	1	2	3	3	9	0	0	0	0	0	18
TOTAL	2	3	15	31	49	71	22	0	0	0	1	0	194

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 11
NUMBER OF VALID HOURS: 194
TOTAL HOURS FOR THE PERIOD: 205

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 10/ 1/06 0:00 TO 12/31/06 23:00

PRIMARY SENSORS - 30 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	16	28	18	32	21	63	41	0	0	0	0	14	233
NNE	23	25	11	35	32	54	7	0	0	0	0	3	190
NE	27	46	14	17	31	30	2	0	0	0	0	0	167
ENE	14	40	19	20	13	11	3	0	0	0	0	0	120
E	2	14	28	27	18	2	0	0	0	0	0	0	91
ESE	2	7	22	22	32	33	8	0	0	0	0	0	126
SE	1	2	15	66	98	125	31	0	0	0	0	0	338
SSE	3	3	5	19	23	25	14	4	0	0	0	0	96
S	0	5	4	18	9	22	16	4	0	0	0	0	78
SSW	1	2	4	10	7	18	3	0	0	0	0	0	45
SW	3	3	4	7	6	7	1	0	0	0	0	0	31
WSW	1	1	5	11	19	8	4	0	0	0	0	0	49
W	0	5	11	15	18	10	7	0	0	0	0	0	66
WNW	4	8	13	16	17	11	21	0	0	0	0	0	90
NW	9	24	16	16	10	17	29	0	0	0	0	1	122
NNW	9	32	24	28	19	31	29	0	0	0	0	1	173
TOTAL	115	245	213	359	373	467	216	8	0	0	0	19	2015

NUMBER OF CALMS: 3
NUMBER OF INVALID HOURS: 190
NUMBER OF VALID HOURS: 2018
TOTAL HOURS FOR THE PERIOD: 2208

STABILITY CLASS A

FROM 10/ 1/06 0:00 TO 12/31/06 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	2	10	5	0	0	0	0	0	17
NNE	0	0	0	2	3	21	4	0	0	0	0	0	30
NE	0	0	0	0	6	16	1	0	0	0	0	0	23
ENE	0	0	0	0	5	5	0	0	0	0	0	0	10
E	0	0	0	2	5	1	0	0	0	0	0	0	8
ESE	0	0	0	2	9	11	0	0	0	0	0	0	22
SE	0	0	0	1	11	32	10	0	0	0	0	0	54
SSE	0	0	0	0	3	6	3	0	0	0	0	0	12
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	2	0	0	0	0	0	0	0	2
W	0	0	0	0	1	0	1	0	0	0	0	0	2
WNW	0	0	0	0	0	0	2	0	0	0	0	0	2
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	7	47	102	27	0	0	0	0	0	183

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 2
NUMBER OF VALID HOURS: 183
TOTAL HOURS FOR THE PERIOD: 185

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 10/ 1/06 0:00 TO 12/31/06 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	2	5	6	0	0	0	0	0	14
NNE	0	0	0	0	0	3	0	0	0	0	0	0	3
NE	0	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	2	0	0	0	0	0	0	0	2
ESE	0	0	0	1	1	3	0	0	0	0	0	0	5
SE	0	0	0	1	1	5	0	0	0	0	0	0	7
SSE	0	0	0	0	2	2	2	0	0	0	0	0	6
S	0	0	0	0	0	1	0	0	0	0	0	0	1
SSW	0	0	0	1	0	1	0	0	0	0	0	0	2
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	0	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	0	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	3	0	0	0	0	0	3
NNW	0	0	0	0	0	2	2	0	0	0	0	0	4
TOTAL	0	0	0	4	8	23	13	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

STABILITY CLASS C

FROM 10/ 1/06 0:00 TO 12/31/06 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	1	3
NNE	0	0	0	1	0	1	0	0	0	0	0	0	2
NE	0	0	0	0	1	1	0	0	0	0	0	0	2
ENE	0	1	0	0	2	0	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	0	1	1	0	0	0	0	0	0	2
SE	0	0	0	0	1	1	0	0	0	0	0	0	2
SSE	0	0	0	0	1	1	0	0	0	0	0	0	2
S	0	0	0	1	0	1	0	0	0	0	0	0	2
SSW	0	0	0	0	0	2	0	0	0	0	0	0	2
SW	0	0	0	0	0	0	0	0	0	0	0	0	0
WSW	0	0	0	1	1	1	0	0	0	0	0	0	3
W	0	0	0	0	1	2	0	0	0	0	0	0	3
WNW	0	0	0	0	0	0	1	0	0	0	0	0	1
NW	0	0	0	0	1	2	0	0	0	0	0	0	3
NNW	0	0	0	0	0	2	2	0	0	0	0	0	4
TOTAL	0	1	0	3	9	16	4	0	0	0	0	1	34

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 34
TOTAL HOURS FOR THE PERIOD: 34

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 10/ 1/06 0:00 TO 12/31/06 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	5	3	27	26	0	0	0	0	13	74
NNE	0	0	1	7	8	14	1	0	0	0	0	3	34
NE	0	0	2	6	7	6	1	0	0	0	0	0	22
ENE	0	0	1	2	2	0	0	0	0	0	0	0	5
E	0	0	4	3	1	0	0	0	0	0	0	0	8
ESE	0	1	3	4	6	4	1	0	0	0	0	0	19
SE	0	0	0	7	19	33	4	0	0	0	0	0	63
SSE	0	0	0	2	4	5	5	2	0	0	0	0	18
S	0	0	0	4	2	11	7	4	0	0	0	0	28
SSW	0	1	3	2	3	10	0	0	0	0	0	0	19
SW	0	0	2	4	2	2	1	0	0	0	0	0	11
WSW	0	0	2	5	7	5	4	0	0	0	0	0	23
W	0	0	4	10	5	3	5	0	0	0	0	0	27
WNW	0	0	1	6	4	7	17	0	0	0	0	0	35
NW	0	0	0	3	5	13	22	0	0	0	0	1	44
NNW	0	1	4	5	6	22	25	0	0	0	0	1	64
TOTAL	0	3	27	75	84	162	119	6	0	0	0	18	494

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 494
TOTAL HOURS FOR THE PERIOD: 494

STABILITY CLASS E

FROM 10/ 1/06 0:00 TO 12/31/06 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	1	3	8	13	20	3	0	0	0	0	0	49
NNE	1	1	5	6	16	14	2	0	0	0	0	0	45
NE	0	1	5	4	12	5	0	0	0	0	0	0	27
ENE	0	1	3	10	4	6	3	0	0	0	0	0	27
E	0	4	5	15	10	1	0	0	0	0	0	0	35
ESE	0	2	12	11	9	14	7	0	0	0	0	0	55
SE	0	2	5	36	60	52	17	0	0	0	0	0	172
SSE	0	2	3	7	11	11	4	2	0	0	0	0	40
S	0	1	3	8	5	5	9	0	0	0	0	0	31
SSW	0	0	1	6	4	5	3	0	0	0	0	0	19
SW	1	2	1	3	4	5	0	0	0	0	0	0	16
WSW	0	1	2	3	5	1	0	0	0	0	0	0	12
W	0	1	4	5	9	5	1	0	0	0	0	0	25
WNW	1	1	7	7	13	4	1	0	0	0	0	0	34
NW	0	0	2	8	4	2	3	0	0	0	0	0	19
NNW	0	1	2	6	8	5	0	0	0	0	0	0	22
TOTAL	4	21	63	143	187	155	53	2	0	0	0	0	628

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 628
TOTAL HOURS FOR THE PERIOD: 628

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 10/ 1/06 0:00 TO 12/31/06 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	5	3	8	1	0	0	0	0	0	0	0	18
NNE	2	3	3	16	5	1	0	0	0	0	0	0	30
NE	1	5	2	6	5	2	0	0	0	0	0	0	21
ENE	2	8	3	7	0	0	0	0	0	0	0	0	20
E	1	4	6	7	0	0	0	0	0	0	0	0	18
ESE	1	2	3	4	6	0	0	0	0	0	0	0	16
SE	1	0	6	13	5	2	0	0	0	0	0	0	27
SSE	1	1	0	6	2	0	0	0	0	0	0	0	10
S	0	2	1	2	2	4	0	0	0	0	0	0	11
SSW	0	0	0	1	0	0	0	0	0	0	0	0	1
SW	2	0	0	0	0	0	0	0	0	0	0	0	2
WSW	0	0	1	1	4	0	0	0	0	0	0	0	6
W	0	2	3	0	2	0	0	0	0	0	0	0	7
WNW	2	3	2	3	0	0	0	0	0	0	0	0	10
NW	1	4	5	1	0	0	0	0	0	0	0	0	11
NNW	1	3	4	7	5	0	0	0	0	0	0	0	20
TOTAL	16	42	42	82	37	9	0	0	0	0	0	0	228

NUMBER OF CALMS: 1
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 229
TOTAL HOURS FOR THE PERIOD: 229

STABILITY CLASS G

FROM 10/ 1/06 0:00 TO 12/31/06 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	14	22	12	10	0	0	0	0	0	0	0	0	58
NNE	20	21	2	3	0	0	0	0	0	0	0	0	46
NE	26	40	5	1	0	0	0	0	0	0	0	0	72
ENE	12	30	12	1	0	0	0	0	0	0	0	0	55
E	1	6	13	0	0	0	0	0	0	0	0	0	20
ESE	1	2	4	0	0	0	0	0	0	0	0	0	7
SE	0	0	4	8	1	0	0	0	0	0	0	0	13
SSE	2	0	2	4	0	0	0	0	0	0	0	0	8
S	0	2	0	3	0	0	0	0	0	0	0	0	5
SSW	1	1	0	0	0	0	0	0	0	0	0	0	2
SW	0	1	1	0	0	0	0	0	0	0	0	0	2
WSW	1	0	0	1	0	0	0	0	0	0	0	0	2
W	0	2	0	0	0	0	0	0	0	0	0	0	2
WNW	1	4	3	0	0	0	0	0	0	0	0	0	8
NW	8	20	9	4	0	0	0	0	0	0	0	0	41
NNW	8	27	14	10	0	0	0	0	0	0	0	0	59
TOTAL	95	178	81	45	1	0	0	0	0	0	0	0	400

NUMBER OF CALMS: 2
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 402
TOTAL HOURS FOR THE PERIOD: 402

RIVER BEND STATION
JOINT FREQUENCY TABLE
ALL STABILITY CLASSES

FROM 10/ 1/06 0:00 TO 12/31/06 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	4	9	33	82	17	0	0	0	10	156
NNE	0	1	4	6	15	47	103	8	0	0	0	7	191
NE	0	0	1	7	7	34	102	4	1	0	0	0	156
ENE	0	1	1	7	6	30	44	16	3	0	0	0	108
E	0	0	5	14	13	33	41	14	1	0	0	0	121
ESE	0	0	1	6	7	36	229	72	37	0	0	0	388
SE	0	1	1	7	9	33	83	22	5	0	0	0	161
SSE	0	1	0	9	3	20	37	5	5	0	0	0	80
S	0	0	2	11	15	26	32	5	4	0	0	0	95
SSW	0	1	2	10	9	21	22	3	0	0	0	0	68
SW	0	1	2	2	12	20	5	2	0	0	0	0	44
WSW	0	0	0	10	10	32	3	8	0	0	0	0	63
W	0	0	1	9	20	32	14	7	1	0	0	0	84
WNW	0	0	3	9	18	18	28	17	1	0	0	1	95
NW	0	0	0	7	9	26	34	13	1	0	0	0	90
NNW	1	1	1	3	16	27	57	13	0	0	0	1	120
TOTAL	1	7	25	121	178	468	916	226	59	0	0	19	2020

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 188
NUMBER OF VALID HOURS: 2020
TOTAL HOURS FOR THE PERIOD: 2208

STABILITY CLASS A

FROM 10/ 1/06 0:00 TO 12/31/06 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	5	0	0	0	0	0	7
NNE	0	0	0	1	1	8	17	4	0	0	0	0	31
NE	0	0	0	0	0	4	25	1	0	0	0	0	30
ENE	0	0	0	0	1	4	10	4	0	0	0	0	19
E	0	0	0	1	2	4	3	2	0	0	0	0	12
ESE	0	0	0	0	0	5	34	14	7	0	0	0	60
SE	0	0	0	0	1	3	8	4	0	0	0	0	16
SSE	0	0	0	0	0	0	3	0	0	0	0	0	3
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	2	0	0	0	0	0	0	2
W	0	0	0	0	0	1	3	0	0	0	0	0	4
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	0	0	0	0	0	0	0
TOTAL	0	0	0	2	5	33	109	29	7	0	0	0	185

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 185
TOTAL HOURS FOR THE PERIOD: 185

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS B

FROM 10/ 1/06 0:00 TO 12/31/06 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	1	7	2	0	0	0	0	10
NNE	0	0	0	0	1	2	3	1	0	0	0	0	7
NE	0	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	1	1	2	0	0	0	0	0	4
ESE	0	0	0	0	0	2	2	4	0	0	0	0	8
SE	0	0	0	0	1	1	2	1	0	0	0	0	5
SSE	0	0	0	0	0	1	2	1	0	0	0	0	4
S	0	0	0	0	1	1	0	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	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	0	2	0	0	0	0	0	2
NW	0	0	0	0	0	0	1	0	0	0	0	0	1
NNW	0	0	0	0	0	0	3	1	0	0	0	0	4
TOTAL	0	0	0	0	4	10	24	10	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

STABILITY CLASS C

FROM 10/ 1/06 0:00 TO 12/31/06 23:00

PRIMARY SENSORS - 150 FOOT

WIND SPEED (METERS/SECOND)

WIND DIR	.22- .50	.51- .75	.76- 1.0	1.1- 1.5	1.6- 2.0	2.1- 3.0	3.1- 5.0	5.1- 7.0	7.1- 10.0	10.1- 13.0	13.1- 18.0	>18	TOT.
N	0	0	0	1	0	0	1	1	0	0	0	0	3
NNE	0	0	0	0	1	0	1	0	0	0	0	1	3
NE	0	0	0	0	0	0	3	0	0	0	0	0	3
ENE	0	0	0	0	1	1	0	0	0	0	0	0	2
E	0	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	2	0	1	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	1	0	0	0	0	0	1
S	0	0	0	0	0	0	1	0	0	0	0	0	1
SSW	0	0	0	0	0	1	0	0	0	0	0	0	1
SW	0	0	0	0	0	1	0	0	0	0	0	0	1
WSW	0	0	0	0	1	2	0	0	0	0	0	0	3
W	0	0	0	0	0	3	0	0	0	0	0	0	3
WNW	0	0	0	0	0	1	0	1	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	2	1	0	0	0	0	3
TOTAL	0	0	0	1	3	11	14	3	1	0	0	1	34

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 34
TOTAL HOURS FOR THE PERIOD: 34

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS D

FROM 10/ 1/06 0:00 TO 12/31/06 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	3	14	26	13	0	0	0	10	66
NNE	0	0	2	1	1	9	18	0	0	0	0	6	37
NE	0	0	0	2	3	4	15	1	1	0	0	0	26
ENE	0	0	0	1	1	4	6	0	0	0	0	0	12
E	0	0	0	2	3	1	3	3	0	0	0	0	12
ESE	0	0	0	1	2	10	27	5	5	0	0	0	50
SE	0	0	0	0	0	4	23	7	0	0	0	0	34
SSE	0	0	0	1	1	1	6	3	3	0	0	0	15
S	0	0	0	0	3	4	10	4	4	0	0	0	25
SSW	0	0	2	3	1	4	8	1	0	0	0	0	19
SW	0	0	0	1	2	5	0	1	0	0	0	0	9
WSW	0	0	0	4	7	8	1	7	0	0	0	0	27
W	0	0	0	4	6	11	5	7	1	0	0	0	34
WNW	0	0	2	1	5	1	8	15	1	0	0	1	34
NW	0	0	0	1	0	10	22	10	1	0	0	0	44
NNW	0	1	0	0	3	5	29	11	0	0	0	1	50
TOTAL	0	1	6	22	41	95	207	88	16	0	0	18	494

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 494
TOTAL HOURS FOR THE PERIOD: 494

STABILITY CLASS E

FROM 10/ 1/06 0:00 TO 12/31/06 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	7	20	1	0	0	0	0	32
NNE	0	0	0	2	2	12	39	3	0	0	0	0	58
NE	0	0	0	3	1	9	20	2	0	0	0	0	35
ENE	0	0	0	3	0	7	10	5	3	0	0	0	28
E	0	0	2	4	2	11	20	5	1	0	0	0	45
ESE	0	0	0	1	2	11	97	47	24	0	0	0	182
SE	0	0	1	2	1	8	30	10	5	0	0	0	57
SSE	0	0	0	1	2	2	14	1	2	0	0	0	22
S	0	0	0	2	5	8	15	1	0	0	0	0	31
SSW	0	0	0	2	2	7	9	2	0	0	0	0	22
SW	0	0	0	1	3	3	5	1	0	0	0	0	13
WSW	0	0	0	2	2	7	1	1	0	0	0	0	13
W	0	0	0	2	5	11	6	0	0	0	0	0	24
WNW	0	0	0	4	6	1	15	1	0	0	0	0	27
NW	0	0	0	2	5	4	3	3	0	0	0	0	17
NNW	0	0	1	0	5	7	9	0	0	0	0	0	22
TOTAL	0	0	5	32	45	115	313	83	35	0	0	0	628

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 628
TOTAL HOURS FOR THE PERIOD: 628

RIVER BEND STATION
JOINT FREQUENCY TABLE
STABILITY CLASS F

FROM 10/ 1/06 0:00 TO 12/31/06 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	1	8	0	0	0	0	0	11
NNE	0	0	0	0	3	9	14	0	0	0	0	0	26
NE	0	0	0	1	0	10	20	0	0	0	0	0	31
ENE	0	0	0	0	0	4	8	6	0	0	0	0	18
E	0	0	0	3	0	6	5	4	0	0	0	0	18
ESE	0	0	0	2	0	3	37	1	0	0	0	0	43
SE	0	0	0	3	2	3	3	0	0	0	0	0	11
SSE	0	0	0	0	0	8	2	0	0	0	0	0	10
S	0	0	0	1	0	4	4	0	0	0	0	0	9
SSW	0	1	0	1	1	0	4	0	0	0	0	0	7
SW	0	0	0	0	4	1	0	0	0	0	0	0	5
WSW	0	0	0	1	0	8	1	0	0	0	0	0	10
W	0	0	0	1	3	0	0	0	0	0	0	0	4
WNW	0	0	1	3	3	4	0	0	0	0	0	0	11
NW	0	0	0	0	1	3	0	0	0	0	0	0	4
NNW	0	0	0	1	6	0	4	0	0	0	0	0	11
TOTAL	0	1	1	17	25	64	110	11	0	0	0	0	229

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 229
TOTAL HOURS FOR THE PERIOD: 229

STABILITY CLASS G

FROM 10/ 1/06 0:00 TO 12/31/06 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	2	2	8	15	0	0	0	0	0	27
NNE	0	1	2	2	6	7	11	0	0	0	0	0	29
NE	0	0	1	1	3	7	19	0	0	0	0	0	31
ENE	0	1	1	3	3	10	10	1	0	0	0	0	29
E	0	0	3	4	5	10	8	0	0	0	0	0	30
ESE	0	0	1	2	3	5	30	1	0	0	0	0	42
SE	0	1	0	2	4	12	17	0	0	0	0	0	36
SSE	0	1	0	7	0	8	9	0	0	0	0	0	25
S	0	0	2	8	6	9	2	0	0	0	0	0	27
SSW	0	0	0	4	5	9	1	0	0	0	0	0	19
SW	0	1	2	0	3	10	0	0	0	0	0	0	16
WSW	0	0	0	3	0	4	0	0	0	0	0	0	7
W	0	0	1	2	6	6	0	0	0	0	0	0	15
WNW	0	0	0	1	4	11	3	0	0	0	0	0	19
NW	0	0	0	4	3	9	4	0	0	0	0	0	20
NNW	1	0	0	2	2	15	10	0	0	0	0	0	30
TOTAL	1	5	13	47	55	140	139	2	0	0	0	0	402

NUMBER OF CALMS: 0
NUMBER OF INVALID HOURS: 0
NUMBER OF VALID HOURS: 402
TOTAL HOURS FOR THE PERIOD: 402

Table 7

Effluent and Waste Disposal Annual Report 2006 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 (4)	994 m WNW	CHI/Q - 421.0	CHI/Q - 33.1
Resident		D/Q - 50.3	D/Q - 18.0
Garden			
Meat animal			
Immersion			
Milk animal (5)	7,000 m WNW	CHI/Q - 3.58 D/Q - 0.38	CHI/Q - .870 D/Q - .223
Other on-site Receptors	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/m^3
(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.

Attachment 1

Process Control Program

Title: **Process Control Program**

Procedure Owner:	**Mark L. Carver / Radwaste Corporate Staff**	
	(Print Name / Title)	
Approved:	Mark L. Carver	**3/27/06**
	(Procedure Owner Signature)	(Date)

Effective Date	**EN Common**	☒	**3/28/06**	**Effective Date Exception**	**ANO**		**PNPS**	**5/15/06**
	ENN	☐			**ECH**	**N/A**	**RBS**	
	ENS	☐			**GGNS**		**VY**	**N/A**
					IPEC	**N/A**	**W3**	
					JAF		**WPO**	**N/A**

Basis Statement

- Formatting of EN-RW-105 was completed to match EN-AD-101
- Editorial clarification for definition of Batch
- Additional clarification within Section 1.0
- Approval of this Revision 0 will provide the procedure as a fleet wide procedure with cancellation of the EN-S and EN-N regional procedures

Procedures Affected By This Revision

See basis statement

Process Applicability Exclusion (ENN-LI-100) / Programmatic Exclusion (ENS-LI-101)

All Sites: ☐ Specific Sites: ANO ☐ GGNS ☐ IPEC ☐ JAF ☐ PNPS ☐ RBS ☐ VY ☐ W3 ☐

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1.0 PURPOSE

The Process Control Program (PCP) requires formulas, sampling, analyses, test and determinations to be made to ensure that the processing and packing of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61 and 71, State Regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste. The scope of a PCP is to assure that radioactive waste will be handled, shipped, and disposed of in a safe manner in accordance with approved site or vendor procedures, whichever is applicable. **[GGNS UFSAR, Chapter 16B.1 / TRM – 7.6.3.8 paragraph 1]**

EN-RW-105 implements the requirements of 10CFR Part 50.36a and General Design Criteria 60 of Appendix A to 10CFR Part 50. The process parameters included in the Process Control Program may include but are not limited to waste type, waste pH, waste/liquid/solidification agent/catalyst ratios, waste oil content, waste principal chemical constituents, and mixing and curing times.

2.0 REFERENCES

[1] EN-QV-104, “Entergy Quality Assurance Program Manual Control”

[2] Title 49, Code of Federal Regulations

[3] Title 10, Code of Federal Regulations

[4] Low-Level Waste Licensing Branch Technical Position on Radioactive Waste Classification, 11 May 1983

[5] Disposal Site Criteria and License

[6] Waste Processor Acceptance Criteria

[7] LI-101, “10CFR50.59 Review Program”

3.0 DEFINITIONS

[1] Batch – A quantity of waste to be processed having essentially consistent physical and chemical characteristics as determined through past experience or system operation knowledge by the Radwaste Shipping Specialist. A batch could be a waste tank, several waste tanks grouped together or a designated time period such as between outages as with the DAW waste stream.

[2] Certificate of Compliance - Document issued by the USNRC regulating use of a NRC licensed cask or issued by DHEC regulating a High Integrity Container.

[3] Chelating Agents - EDTA, DTPA, hydroxy-carboxylic acids, citric acid, carbolic acid and glucinic acid.

[4] Compaction - The process of volume reducing solid waste by applying external pressure.

[5] Confirmatory Analysis - The practice of verifying that gross radioactivity measurements using MCA are reasonably consistent with independent laboratory sample data.

[6] Dewatered Waste - Wet waste that has been processed by means other than solidification, encapsulation, or absorption to meet the free standing liquid requirements of 10CFR Part 61.56 (a)(3) and (b)(2).

[7] De-watering - The removal of water or liquid from a waste form, usually by gravity or pumping.

[8] Dilution Factor - The RADMAN computer code factor to account for the non-radioactive binder added to the waste stream in the final product when waste is solidified.

[9] Dry Waste - Radioactive waste which exist primarily in a non-liquid form and includes such items as dry materials, metals, resins, filter media and sludges.

[10] Encapsulation - Encapsulation is a means of providing stability for certain types of waste by surrounding the waste by an appropriate encapsulation media.

[11] Gamma-Spectral-Analysis - Also known as IG, MCA, Ge/Li and gamma spectroscopy.

[12] Gross Radioactivity Measurements - More commonly known as dose to curie conversion for packaged waste characterization and classification.

[13] Homogeneous - Of the same kind or nature; essentially alike. Most Volumetric waste streams are considered homogeneous for purposes of waste classification.

[14] Incineration – The process of burning a combustible material to reduce its volume and yield an ash residue.

[15] Liquid Waste - Radioactive waste that exist primarily in a liquid form and is contained in other than installed plant systems, to include such items as oil, EHC fluid, and other liquids.

[16] Low-Level Radioactive Waste (LLW) - Those wastes containing source, special nuclear, or by-product material that are acceptable for disposal in a land disposal facility. For the purposes of this definition, low-level radioactive waste has the same meaning as in the Low-Level Waste Policy Act, that is, radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material as defined in section 11e.(2) of the Atomic Energy Act (uranium or thorium tailings and waste).

[17] Measurement of Specific Radionuclides - More commonly known as direct sample or container sample using MCA data for packaged waste characterization and classification.

[18] Processing - Changing, modifying, and/or packaging wet radioactive waste into a form that is acceptable to a disposal facility.

[19] Quality Assurance/Quality Control - As used in this document, "quality assurance" comprises all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service. Quality assurance includes quality control, which comprises those quality assurance actions related to the physical characteristics of a material structure, component, or system to predetermined requirements.

[20] Reportable Quantity Radionuclides (RQ) - Any radionuclide listed in column (1) of Table 2 of 49CFR Part 172.101 which is present in quantities as listed in column (3) of Table 2 of 49CFR Part 172.101.

[21] Sampling Plan - A program to ensure that representative samples from the feed waste and the final waste form are obtained and tested for conformance with parameters stated in the PCP and waste form acceptance criteria.

[22] Scaling Factor - A dimensionless number which relates the concentration of an easy to measure radionuclide (gamma emitter) to one which is difficult to measure (beta and/or alpha emitters).

[23] Significant Quantity - For purposes of waste classification all the following radionuclide values SHALL be considered significant and must be reported on the disposal manifest.

- Any value (real or LLD) for radionuclides listed in Appendix G to 10CFR20 (H-3, C-14, I-129, Tc-99).
- Greater than or equal to 1 percent of the concentration limits as listed in 10CFR Part 61.55 Table 1 .
- Greater than or equal to 1 percent of the Class A concentration limits listed in 10CFR Part 61.55 Table 2.

- Greater than or equal to 1 percent of the total activity.
- Greater than or equal to 1 percent of the Reportable Quantity limits listed on 49CFR Part 172.101 Table 2.

[24] Solidification - The conversion of wet waste into a free-standing monolith by the addition of an agent so that the waste meets the stability and free-standing liquid requirements of the disposal site.

[25] Special Radionuclides - The RADMAN computer code term for radionuclides listed in Appendix G to 10CFR20 (i.e., H-3, C-14, I-129 & Tc-99)

[26] Stability – Structural stability per 10CFR61.2. This can be provided by the waste form, or by placing the waste in a disposal container or structure that provides stability after disposal. Stability requires that the waste form maintain its structural integrity under the expected disposal conditions.

[27] Volume Reduction – any process that reduces the volume of waste. This includes but is not limited to, compaction and incineration.

[28] Waste Container - A vessel of any shape, size, and composition used to contain the final processed waste.

[29] Waste Form - Waste in a waste container acceptable for disposal at a licensed disposal facility.

[30] Waste Stream - A Plant specific and constant source of waste with a distinct radionuclide content and distribution.

[31] Waste Type – A single packaging configuration and waste form tied to a specific waste stream.

4.0 RESPONSIBILITIES

4.1 The Vice President Operations Support (VPOS) is responsible for the implementation of this procedure.

4.2 Each site Senior Nuclear Executive (SNE) is responsible for ensuring that necessary site staff implements this procedure.

4.3 The Low Level RadWaste (LLRW) Focus Group is responsible for evaluating and recommending changes and revisions to this procedure.

5.0 DETAILS

An isotopic analysis shall be performed on every batch for each waste stream so that the waste can be classified in accordance with 10CFR61. The isotopic and curie content of each shipping container shall be determined in accordance with 49CFR packaging requirements. The total activity in the container may be determined by either isotopic analysis or by dose-rate-to-curie conversion.

5.1 PRECAUTIONS AND LIMITATIONS

None

5.2 Dry Waste Management

NOTE

If the provisions of the Process Control Program are not satisfied, suspend shipment of the defectively processed or defectively packaged solid waste from the site. Shipment may be accomplished when the waste is processed / packaged in accordance with the Process Control Program.

[1] Dry waste may be packaged and processed either on-site or at a licensed off-site waste processing facility. The licensed off-site waste processing facility will take title to the waste and certify that it has been properly incinerated, solidified or vitrified prior to disposal.

[2] Dry waste will meet applicable regulatory requirements, vendor waste acceptance criteria and disposal site acceptance criteria.

[3] Dry waste processing may include, but is not limited to compaction, incineration, bulk processing, dewatering, or any other acceptance technologies available.

5.3 Liquid Waste Management

NOTE

The solidification of liquid wastes will be verified with surveillance activities of an approved Process Control Program.

[1] Liquid waste may be packaged and processed either on-site or at a licensed off-site waste processing facility. The licensed off-site waste processing facility will take title to the waste and certify that it has been properly incinerated, solidified or vitrified prior to disposal.

[2] Liquid waste will meet applicable regulatory requirements, vendor waste acceptance criteria and disposal site acceptance criteria.

[3] Liquid waste processing may include, but is not limited to incineration, solidification, or any other acceptance technologies available.

5.4 Quality Assurance

[1] Reviews of solid waste activities performed under the guidance of the Process Control Program are completed through audits and selected monitoring activities.

[2] Certain elements of the Entergy Quality Assurance Program Manual are applied to the Process Control Program.

5.5 Administrative Controls

[1] Information on solid radioactive waste shipped off-site is reported annually to the Nuclear Regulatory Commission in the Annual Radioactive Effluent Release Report as specified by the Offsite Dose Calculation Manual (ODCM)or Technical Specification. **[ANO1 Technical Specifications - 5.6.3] [ANO2 Technical Specifications – 6.9.3] [WF3 Technical Specifications – 6.9.18] [GGNS ODCM – 5.6.3.c]**

[2] All changes to the PCP shall be documented. All records of reviews performed shall be retained as required by the Quality Assurance Program. The documentation of the changes shall **[GGNS UFSAR, Chapter 16B.1 / TRM – 7.6.3.8 paragraph 2]**:

(a) Contain sufficient information to support the change with appropriate analyses or evaluations justifying the change.

(b) Include a determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State or other applicable regulations.

[3] All changes in the Process Control Program and supporting documentation are included in each site's next Annual Radiological Effluent Release Report to the Nuclear Regulatory Commission with the following exception at Grand Gulf Nuclear Station and James A. FitzPatrick Nuclear Station. James A. FitzPatrick and. Grand Gulf Specific Requirement – PCP changes are not submitted to the NRC. **[ANO ODCM - L3.2.1.B]**

[4] The changes to RW-105 shall become effective upon review and acceptance by the site's General Plant Manager except as listed below:

(a) For Grand Gulf Nuclear Station, the changes to RW-105 shall be accomplished as specified in Grand Gulf Nuclear Station Technical Requirements Manual (TRM) Section 7.6.3.8. The changes shall become effective upon review and acceptance by the On-site Safety

Review Committee (OSRC) and the approval of the GGNS Plant General Manager. **[GGNS UFSAR, Chapter 16B.1 / TRM – 7.6.3.8 paragraph 2]**

(b) For River Bend Nuclear Station, the procedure approval along with changes to RW-105 shall be accomplished per the River Bend Nuclear Station Technical Requirements, Section 5.5.14.1. The changes shall become effective upon review and acceptance by approval from the River Bend Nuclear Station Plant Manager or Radiation Protection Manager. **[RBS Technical Requirements – 5.5.14.1, 5.5.14.2 & 5.8.2]**

(c) For Waterford 3, the procedure approval along with changes to RW-105 shall be accomplished per Waterford 3 Technical Specifications 6.13.2. The changes shall become effective upon review and acceptance by the Waterford 3 General Plant Manager. **[WF3 Technical Specifications – 6.13.2.b]**

(d) Each site will maintain applicable state and federal regulations (web based access is acceptable), vendor waste acceptance criteria and disposal site waste acceptance criteria.

5.6 Vendor Requirements

[1] Vendors performing radwaste services under 10CFR61 and 10CFR71 requirements will be on the Entergy Qualified Supplier's List (QSL).

[2] Vendors performing radwaste services on-site are to comply with the following:

(a) Dewatering and solidification services shall have a NRC approved Topical Report or other form of certification documenting NRC approval of the processes and associated equipment/containers.

(b) All vendor procedures utilized for performing on-site radwaste services will be reviewed per the requirements of LI-101, technically by the applicable site's Radiation Protection organization and only be accepted per the approvals specified in Section 5.5[4].

(c) All changes to vendor procedures for ongoing on-site radwaste services will be reviewed technically by the site's Radiation Protection organization and screened per the requirements of LI-101, "10CFR50.59 Review Program". Significant procedural changes will require the approvals specified in Section 5.5[4]. During screening, the level of significance for procedural changes on equipment and process parameters may warrant the full 10CFR50.59 documentation and approval process.

6.0 INTERFACES

[1] EN-LI-101, “10CFR50.59 Review Program”

[2] EN-RW-104, “Scaling Factors”

[3] EN-QV-104, “Entergy Quality Assurance Program Manual Control”

7.0 RECORDS

[1] Documentation of pertinent data required to classify waste and verify solidification will be maintained on each batch of processed waste as required by approved procedures.

[2] Documentation will also be maintained to ensure that containers, shipping casks, and methods of packaging wastes meet applicable Federal regulations and disposal site criteria. The records of reviews performed and documents associated with these reviews will be maintained as QA records.

8.0 OBLIGATION AND REGULATORY COMMITMENT CROSS-REFERENCES

Document	Document Section	NMM Procedure Section	Site Applicability
ANO ODCM	L3.2.1.B	5.5 [3]	ANO
ANO1 Technical Specifications	5.6.3	5.5 [1]	ANO
ANO2 Technical Specifications	6.9.3	5.5 [1]	ANO
RBS Technical Requirements	5.5.14	*	RBS
RBS Technical Requirements	5.5.14.1	5.5 [4] (b)	RBS
RBS Technical Requirements	5.5.14.2	5.5 [4] (b)	RBS
RBS Technical Requirements	5.8.2	5.5 [4] (b)	RBS
WF3 Technical Specifications	1.22	*	WF3
WF3 Technical Specifications	6.9.18	5.5 [1]	WF3
WF3 Technical Specifications	6.13.2.b	5.5 [4] (c)	WF3
11759 – NRC IN 79-19	All	*	WF3
GGNS UFSAR, Chapter 16B.1 / TRM	7.6.3.8 paragraph 1	1.0	GGNS
GGNS ODCM	5.6.3.c	5.5 [1]	GGNS
GGNS FSAR	11.4.5.S2	5.6[2](a)	GGNS
GGNS FSAR	11.4.2.3AS7	5.6[2](a)	GGNS
IPN-99-079	All	*	IPEC
Appendix B Technical Specifications	Section 4.5, RECS ODCM Part 1	*	IPEC
NRC Letter 1.98.091	All	*	VY
NRC Letter 1.88.078	All	*	VY

* Covered by directive as a whole or by various paragraphs of the directive.

9.0 ATTACHMENTS

None