

RIVER BEND STATION - UNIT I
SEMIANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT ADDENDUM

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

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SEMIANNUAL RADIOACTIVE EFFLUENT
RELEASE REPORT ADDENDUM

FACILITY: River Bend Station, Unit 1
LICENSEE: Gulf States Utilities
REPORT PERIOD: July 1, 1991 Through December 31, 1991

Enclosed is the Semiannual Radioactive Effluent Release Report Addendum for the period of July 1, 1991 through December 31, 1991. This report is submitted in accordance with Technical Specification 6.9.1.8 of Appendix A to River Bend Station (RBS) License Number NPF-47. Included is the information obtained from vendor-performed analysis of fourth quarter composite samples that was not available when the Quarter 3/4 RBS Semiannual Radioactive Effluent Release Report was being compiled. Updates are being provided for the following:

- (1) Section VI - Radiological Impact on Man, Page 10.
- (2) Table 3 Gaseous Effluents - Summation of all Releases; Items C.1 -C.3, page 14.
- (3) Table 4 Gaseous Effluents - Conditionally Elevated Releases; Item 3, page 17.
- (4) Table 5 Gaseous Effluents - Ground Level Releases; Item 3, page 20.
- (5) Table 6 Liquid Effluents - Summation of all Releases; Items A.1 - A.3, page 22.
- (6) Table 6 Liquid Effluents - Summation of all Releases; Item G, pages 24 and 25.

An entry of "0.00e+00" Ci in the following tables indicates that the activity of a particular radionuclide was below the Lower Limit of Detection (LLD).

RADIOLOGICAL IMPACT ON MAN

The total body, skin, thyroid, and other organ doses to a member of the public from the uranium fuel cycle (40CFR190 compliance) calculated in accordance with the ODCM was < 25 mrem for the total body, skin and other organs, and less than < 75 mrem for the thyroid.

1. Whole Body Dose	8.8E-01 mrem
2. Skin Dose	1.8E+00 mrem
3. Thyroid Dose	2.2E+00 mrem
4. Other Organs	9.0E-01 mrem

GASEOUS EFFLUENTS

Fourth quarter gaseous doses were calculated using 3rd quarter composite data for Sr-89 and Sr-90. Fourth quarter Sr-89 and Sr-90 composite results were found to give an increase less than one percent (< 1.0 %) of the previously reported organ doses from particulates.

LIQUID EFFLUENTS

Fourth quarter liquid doses were calculated using 2nd quarter composite data for Fe-55, Sr-89, and Sr-90. The 3rd quarter composite results were all < LLD. Fourth quarter composite results were found to give an increase less than one percent (<1.0 %) of the previously reported organ doses from particulates.

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

	Unit	Quarter 3	Quarter 4	Estimated Total Error %
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C. Particulates

1. Particulates with half lives of > 8 days	Ci	PR	7.97E-04	1.86E+01
2. Average release rate for period	uCi/sec	PR	1.01E-04	
3. Percent of technical specification limit	%	PR	1.57E-02	

PR - Previously Reported

TABLE 4 - ADDENDUM

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

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 3	Quarter 4	Quarter 3	Quarter 4

3. Particulates

Strontium-89	Ci	PR	0.00E+00	N/A	N/A
Strontium-90	Ci	PR	1.2'E-06	N/A	N/A
Total for Period	Ci	PR	7.97e-04	N/A	N/A

PR - Previously Reported

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

TABLE 5 - ADDENDUM

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

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

3. Particulates

Strontium-89	Ci	PR	0.00E+00	N/A	N/A
Strontium-90	Ci	PR	2.36E-07	N/A	N/A
Total for Period	Ci	PR	2.36E-07	N/A	N/A

PR - Previously Reported

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

TABLE 6 - ADDENDUM

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

	Unit	Quarter 3	Quarter 4	Est. Total Error %
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A. Fission and activation products

1. Total release (not including tritium, gases, alpha)	Ci	PR	1.61E-01	1.42E+01
2. Average diluted concentration during period	uCi/ml	PR	1.69E-07	
3. Percent of applicable limit	%	PR	1.29E+01	

PR - Previously Reported

TABLE 6 - ADDENDUM
 EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1991 YEAR
 LIQUID EFFLUENTS 3/4 QUARTERS

G. Particulates

Nuclides Released	Unit	Continuous Mode		Patch Mode	
		Quarter 3	Quarter 4	Quarter 3	Quarter 4
Strontium-89	Ci	N/A	N/A	PR	0.00E+00
Strontium-90	Ci	N/A	N/A	PR	0.00E+00
Iron-55	Ci	N/A	N/A	PR	2.27E-03
Total for Period	Ci	N/A	N/A	PR	1.61E-01

PR - Previously Reported