

The Light company

Houston Lighting & Power South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

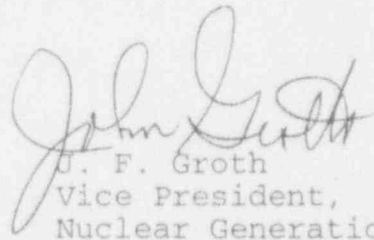
March 1, 1994
ST-HL-AE-4711
File No.: G02
10CFR20.407

REIRS, Project Manager,
Office of Nuclear Regulatory Research
U. S. Nuclear Regulatory Commission
Washington, DC 20555

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Annual Reports Required by Tech. Spec. 6.9.1.2 and 10CFR20.407

Attached are the Annual Reports required by the South Texas Project Electric Generating Station (STPEGS) Technical Specification 6.9.1.2 and 10CFR20.407. These reports consist of: Annual Personnel Exposure Reports required by Technical Specification 6.9.1.2.a and 10CFR20.407. Also attached is a report required by Technical Specification 6.9.1.2.b which provides the results of specific activity analyses for any primary coolant samples exceeding Technical Specification 3.4.8 limits.

If you have any questions on this matter, please contact Mr. S. M. Head at (512) 972-7136.


J. F. Groth
Vice President,
Nuclear Generation

MKJ/eg

- Attachments: 1) Annual Personnel Exposure Reports
2) A Report of Results of Specific Activity Analyses for any primary coolant samples exceeding the Technical Specification 3.4.8 limits.

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Project Manager on Behalf of the Participants in the South Texas Project

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ANNUAL PERSONNEL EXPOSURE REPORTS

Technical Specification 6.9.1.2.a requires a tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposures according to work and job functions. This data is presented on page two of this attachment. Specific tasks included in the Special Maintenance work and job function are listed on page three.

10CFR20.407 requires a report of the total number of individuals for whom personnel monitoring was provided for the reporting year. This number and a statistical summary of whole body exposure to these individuals is presented on page four of this attachment.

During 1993, 3566 personnel were monitored. Approximately 0.4 percent of these individuals received greater than 1.0 rem; due primarily to maintenance activities associated with the Steam Generators.

PLANT RADIATION EXPOSURE PLANNING AND REPORTING DATABASE

Licensee: HOUSTON LIGHTING & POWER COMPANY
 Address: Post Office Box 789
 Wadsworth, Texas 77483
 NRC License Number(s) NPF - 76, NPF - 80

Attachment 1
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REPORTING YEAR:1993

APPENDIX A
 STANDARD FORMAT FOR REPORTING NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION

WORK & JOB FUNCTION	NUMBER OF PERSONNEL (> 100 MREM)			TOTAL MAN-REM*		
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACTORS AND OTHERS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACTORS AND OTHERS
REACTOR OPS & SURVEILLANCE						
Maintenance Personnel	0	0	0	0.360	0.000	0.722
Operating Personnel	15	0	0	4.083	0.000	0.032
Health Physics Personnel	7	0	3	2.335	0.000	1.967
Supervisory Personnel	0	0	0	0.720	0.161	0.000
Engineering Personnel	1	0	0	0.410	0.000	0.049
Nuclear Assurance Personnel	0	0	0	0.072	0.000	0.010
Other Personnel	0	0	1	0.000	0.695	1.887
ROUTINE MAINTENANCE						
Maintenance Personnel	41	0	46	11.745	0.000	13.863
Operating Personnel	0	0	0	0.071	0.000	0.000
Health Physics Personnel	0	0	2	0.443	0.000	0.676
Supervisory Personnel	3	0	0	0.931	0.006	0.000
Engineering Personnel	0	0	1	0.320	0.000	0.613
Nuclear Assurance Personnel	1	0	1	0.980	0.000	0.340
Other Personnel	6	0	26	0.000	0.100	10.371
IN-SERVICE INSPECTION						
Maintenance Personnel	0	0	35	0.621	0.000	13.823
Operating Personnel	0	0	0	0.019	0.000	0.000
Health Physics Personnel	0	0	0	0.213	0.000	0.187
Supervisory Personnel	0	0	0	0.071	0.077	0.000
Engineering Personnel	2	0	10	0.669	0.000	3.547
Nuclear Assurance Personnel	2	0	2	0.919	0.000	0.589
Other Personnel	0	0	39	0.000	0.086	12.156
SPECIAL MAINTENANCE						
Maintenance Personnel	20	0	59	7.848	0.000	26.069
Operating Personnel	0	0	0	0.007	0.000	0.000
Health Physics Personnel	11	0	33	2.610	0.000	7.628
Supervisory Personnel	4	0	0	1.430	0.115	0.000
Engineering Personnel	6	0	21	1.330	0.000	11.636
Nuclear Assurance Personnel	9	0	3	2.728	0.000	1.576
Other Personnel	0	0	114	0.000	0.040	60.158
WASTE PROCESSING						
Maintenance Personnel	1	0	4	0.362	0.000	1.147
Operating Personnel	0	0	0	0.012	0.000	0.000
Health Physics Personnel	5	0	37	1.607	0.000	10.945
Supervisory Personnel	4	0	0	0.685	0.002	0.000
Engineering Personnel	0	0	0	0.001	0.000	0.000
Nuclear Assurance Personnel	0	0	0	0.046	0.000	0.000
Other Personnel	0	0	3	0.000	0.161	1.755
REFUELING						
Maintenance Personnel	5	0	28	1.977	0.000	9.643
Operating Personnel	0	0	0	0.933	0.000	0.093
Health Physics Personnel	25	0	29	7.703	0.000	9.786
Supervisory Personnel	8	0	0	2.647	0.009	0.000
Engineering Personnel	0	0	6	0.142	0.000	4.314
Nuclear Assurance Personnel	0	0	0	0.143	0.000	0.062
Other Personnel	0	1	32	0.000	0.422	8.317
TOTAL WORK & JOB FUNCTION						
Maintenance Personnel	67	0	172	22.913	0.000	65.267
Operating Personnel	15	0	0	5.125	0.000	0.125
Health Physics Personnel	48	0	104	14.911	0.000	31.189
Supervisory Personnel	19	0	0	6.484	0.370	0.000
Engineering Personnel	9	0	38	2.872	0.000	20.159
Nuclear Assurance Personnel	12	0	6	4.888	0.000	2.577
Other Personnel	0	1	215	0.000	1.504	94.644
GRAND TOTAL	170	1	535	57.193	1.874	213.961

* Dose as estimated by Self Reading Dosimeter

Additional Information

- 1) The South Texas Project site includes two 1250 Mw Westinghouse Pressurized Water reactors.
- 2) During 1993, Unit One was in an extended maintenance outage for approximately 12 months. Unit Two was in a refueling outage for approximately 11 months.
- 3) Special maintenance performed during 1993 included the following;
 - a) Repair of steam generator primary manway covers on all four steam generator in both units.
 - b) Repair of steam generator secondary covers in both units.
 - c) Steam generator tube testing/pulling/plugging in all four steam generators in both units.
 - d) Installation of Residual Heat Removal (RHR) differential pressure gauges.
 - e) Reactor Coolant Pump oil line and level sensor maintenance.
 - f) Inspection and repair of the reactor vessel o-ring seating surface.
 - g) Inspection and tightening of the reactor head upper conoseal joint screws.
 - h) Performance of 100% inspection of Dropped Rod Position Indication connectors.
 - i) RHR pump disassembly, inspection and leak repair of all pumps in both units.
- 4) The values are based on self-reading digital dosimetry which was within 10% of the total site exposure based on thermoluminescent dosimetry (TLD).
- 5) The category "Other Personnel" in this report includes contractor personnel who performed primary steam generator inspections and maintenance, and various other special maintenance on plant equipment.

PERSONNEL MONITORING - ANNUAL STATISTICAL REPORT FOR 1993

This report is furnished to the Office of Nuclear Regulatory Research as required by Part 20.407 of the Code of Federal Regulations, Title 10.

Attachment 1
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Licensee: HOUSTON LIGHTING & POWER COMPANY
Address: Post Office Box 289
Wadsworth, Texas 77483

NRC License Numbers: NPF-76; NPF-80

The total number of individuals for whom personnel monitoring was provided for the Reporting Year submitted in accordance with paragraph (a)(2) of Section 20.407 3566

STATISTICAL SUMMARY

Estimated Whole Body Exposure (1,3) (rems)	Number of Individuals in each range/man-rem	
No Measurable Exposure(2)	2428	0.003
Measurable Exposure less than 0.1	543	22.447
0.1 to 0.25	250	42.822
0.25 to 0.5	187	67.735
0.5 to 0.75	87	52.777
0.75 to 1	56	48.194
1 to 2	15	17.122
2 to 3	0	0.000
3 to 4	0	0.000
4 to 5	0	0.000
5 to 6	0	0.000
6 to 7	0	0.000
7 to 8	0	0.000
8 to 9	0	0.000
9 to 10	0	0.000
10 to 11	0	0.000
11 to 12	0	0.000
12+	0	0.000

- *****
- As determined using PANASONIC TLDs
 - Includes exposure less than 0.010 rem
 - Individual values exactly equal to the value separating ranges shall be reported in the higher range.

TOTAL NUMBER OF INDIVIDUALS IN ALL RANGES: 3566 TOTAL MAN-REM 251.100

APPROVED BY: Robert W. Peck
Health Physics Division Manager

Date: 2/18/94

Completed reports shall be retained for the life of the plant plus 75 years

The difference in total man-rem recorded on these two reports is due to the use of thermoluminescent dosimeters (TLD) values on the 10CFR20.407 report and use of self reading dosimeters (SRD) values on the Technical Specification 6.9.1.2.a report.

Single individuals are listed in more than one work category on the Technical Specification 6.9.1.2.a report. This accounts for the apparent discrepancy in the number of individuals with a whole body exposure greater than 100 mRem on the 10CFR20.407 report.

PRIMARY COOLANT SPECIFIC ACTIVITY REPORT

Technical Specification 6.9.1.2.b requires the results of specific activity analyses in which the primary coolant exceeded the limits of Technical Specification 3.4.8 to be reported on an annual basis.

Unit 1 and Unit 2 have not exceeded the limits of Technical Specification 3.4.8 for the calendar year of 1993.