

# The Light company

Houston Lighting & Power

P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

January 10, 1991

ST-HL-AE-3669

File No.: G02

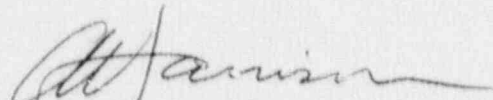
10CFR50.71

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

South Texas Project Electric Generating Station  
Units 1 & 2  
Docket Nos. STN 50-498 & 50-499  
Monthly Operating Reports for December, 1990

Pursuant to 10CFR50.71(a) and South Texas Project Electric Generating Station (STPEGS) Technical Specification 6.9.1.5, attached are the Monthly Operating Reports for December, 1990.

If you should have any questions on this matter, please contact Mr. C. A. Ayala at (512) 972-8628.



A. W. Harrison  
Manager,  
Nuclear Licensing

RAD/sgs

Attachments: 1) STPEGS Unit 1 Monthly Operating Report - December, 1990  
2) STPEGS Unit 2 Monthly Operating Report - December, 1990

1/11  
IE24

Houston Lighting & Power Company  
South Texas Project Electric Generating Station

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cc:

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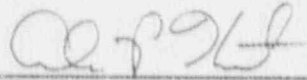

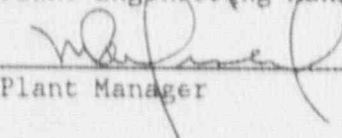
Dr. Joseph M. Hendrie  
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Bellport, NY 11713

D. K. Lacker  
Bureau of Radiation Control  
Texas Department of Health  
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Austin, TX 78756-3189

Revised 10/08/90

L4/NRC/

SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
UNIT 1  
MONTHLY OPERATING REPORT  
DECEMBER 1990  
HOUSTON LIGHTING AND POWER CO.  
NRC DOCKET NO. 50-498  
LICENSE NO. NPF-76

Reviewed By:	<u></u>	<u>1-4-91</u>
	Supervisor	Date
Reviewed By:	<u></u>	<u>1-4-91</u>
	Plant Engineering Manager	Date
Approved By:	<u></u>	<u>1/4/91</u>
	Plant Manager	Date

Monthly Summary

STPEGS Unit 1 remained shutdown following a unit trip on 11/24/90 due to an actuation of the generator ground fault protection relay.

OPERATING DATA REPORT

DOCKET NO. 50-498  
 UNIT 1  
 DATE Jan. 4, 1991  
 COMPLETED BY A.P. Kent  
 TELEPHONE 512/972-7786

OPERATING STATUS

1. REPORTING PERIOD: 12/01-12/31 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 3800  
 MAX.DEPEND.CAPACITY (MWe-Net): 1250.6  
 DESIGN ELECTRICAL RATING (MWe-Net): 1250.6
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY)(MWe-Net): None
4. REASONS FOR RESTRICTION (IF ANY): N/A

	THIS MONTH	YR TO DATE	CUMULATIVE
5. NUMBER OF HOURS REACTOR WAS CRITICAL.....	<u>0</u>	<u>5533.7</u>	<u>13781.1</u>
6. REACTOR RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE.....	<u>0</u>	<u>5202.3</u>	<u>13141.5</u>
8. UNIT RESEVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWt).....	<u>0</u>	<u>18999774</u>	<u>47678208</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH).....	<u>0</u>	<u>6366900</u>	<u>16097490</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH).....	<u>-17726</u>	<u>5999814</u>	<u>15124483</u>
12. REACTOR SERVICE FACTOR.....	<u>0.0%</u>	<u>63.2%</u>	<u>66.8%</u>
13. REACTOR AVAILABILITY FACTOR.....	<u>0.0%</u>	<u>63.2%</u>	<u>66.8%</u>
14. UNIT SERVICE FACTOR.....	<u>0.0%</u>	<u>59.4%</u>	<u>63.7%</u>
15. UNIT AVAILABILITY FACTOR.....	<u>0.0%</u>	<u>59.4%</u>	<u>63.7%</u>
16. UNIT CAPACITY FACTOR (Using MDC).....	<u>-1.9%</u>	<u>54.8%</u>	<u>58.7%</u>
17. UNIT CAPACITY FACTOR (Using Design MWe).....	<u>-1.9%</u>	<u>54.8%</u>	<u>58.7%</u>
18. UNIT FORCED OUTAGE RATE.....	<u>100.0%</u>	<u>23.8%</u>	<u>15.5%</u>
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH): Scheduled 68 day refueling outage to begin January 15, 1991.			
20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: <u>03/24/91</u>			

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-498  
UNIT 1  
DATE Jan. 4, 1991  
COMPLETED BY A.P. Kent  
TELEPHONE 512/972-7786

MONTH DECEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-498  
 UNIT 1  
 DATE Jan. 4, 1991  
 COMPLETED BY A.P. Kent  
 TELEPHONE 512/972-7786

REPORT MONTH DECEMBER

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
90-16	901124	F	744.0	A	4	1-90-025	TJ	CCL	The unit tripped due to an actuation of the generator ground fault protection relay. Internal inspection of the generator revealed damage to the end turn of stator coil #20. A significant amount of header box material was missing, presumably vaporized by an electrical arc from the failed stator coil end turn to the cooling water manifold. Excessive end turn assembly vibration is suspected as the root cause, however additional testing and inspections are necessary before the cause of the failure can be conclusively determined. The generator rotor will be removed and full inspection and repairs will be performed concurrent with the refueling outage.

<sup>1</sup>F: Forced  
 S: Scheduled

<sup>2</sup>Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Exam  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

<sup>3</sup>Method:  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Cont. of Existing Outage  
 5-Reduction  
 9-Other

<sup>4</sup>IEEE 805-1983

<sup>5</sup>IEEE 803A-1983

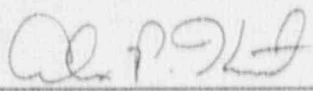

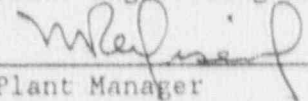
ATTACHMENT 1  
 ST-HL-AE-5069  
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PORVs and Safety Valves Summary

There were no PORV or Safety Valves challenged during the reporting period.



SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
UNIT 2  
MONTHLY OPERATING REPORT  
DECEMBER 1990  
HOUSTON LIGHTING AND POWER CO.  
NRC DOCKET NO. 50-499  
LICENSE NO. NPF-80

Reviewed By:	<u></u>	<u>1-4-91</u>
	Supervisor	Date
Reviewed By:	<u></u>	<u>1-4-91</u>
	Plant Engineering Manager	Date
Approved By:	<u></u>	<u>1/4/91</u>
	Plant Manager	Date

Monthly Summary

Following a refueling outage, STPEGS Unit 2 was returned to service for normal operation on 12/11/90 at 0949. The unit operated for the remainder of the reporting period with no unit shutdowns or significant power reductions.

OPERATING DATA REPORT

DOCKET NO. 50-499  
 UNIT 2  
 DATE Jan. 3, 1991  
 COMPLETED BY A.P. Kent  
 TELEPHONE 512/972-7786

OPERATING STATUS

1. REPORTING PERIOD: 12/01-12/31 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 3800  
 MAX.DEPEND.CAPACITY (MWe-Net): 1250.6  
 DESIGN ELECTRICAL RATING (MWe-Net): 1250.6
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY)(MWe-Net): None
4. REASONS FOR RESTRICTION (IF ANY): N/A

	THIS MONTH	YR TO DATE	CUMULATIVE
5. NUMBER OF HOURS REACTOR WAS CRITICAL.....	<u>607.0</u>	<u>6004.4</u>	<u>8981.3</u>
6. REACTOR RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE.....	<u>508.9</u>	<u>5499.0</u>	<u>8345.6</u>
8. UNIT RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWt)....	<u>1608911</u>	<u>20182891</u>	<u>29705268</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..	<u>534740</u>	<u>6809440</u>	<u>10022470</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)....	<u>497468</u>	<u>6427594</u>	<u>9448768</u>
12. REACTOR SERVICE FACTOR.....	<u>81.6%</u>	<u>68.5%</u>	<u>66.7%</u>
13. REACTOR AVAILABILITY FACTOR.....	<u>81.6%</u>	<u>68.5%</u>	<u>66.7%</u>
14. UNIT SERVICE FACTOR.....	<u>68.4%</u>	<u>62.8%</u>	<u>62.0%</u>
15. UNIT AVAILABILITY FACTOR.....	<u>68.4%</u>	<u>62.8%</u>	<u>62.0%</u>
16. UNIT CAPACITY FACTOR (Using MDC).....	<u>53.5%</u>	<u>58.7%</u>	<u>56.1%</u>
17. UNIT CAPACITY FACTOR (Using Design MWe)..	<u>53.5%</u>	<u>58.7%</u>	<u>56.1%</u>
18. UNIT FORCED OUTAGE RATE.....	<u>0.0%</u>	<u>21.0%</u>	<u>21.0%</u>
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):	<u>N/A</u>		
20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:	<u>N/A</u>		

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-499  
UNIT 2  
DATE Jan. 3, 1991  
COMPLETED BY A.P. Kent  
TELEPHONE 512/972-7786

MONTH DECEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>0</u>
2	<u>0</u>
3	<u>0</u>
4	<u>0</u>
5	<u>0</u>
6	<u>0</u>
7	<u>0</u>
8	<u>0</u>
9	<u>0</u>
10	<u>0</u>
11	<u>130</u>
12	<u>252</u>
13	<u>297</u>
14	<u>499</u>
15	<u>824</u>
16	<u>910</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>943</u>
18	<u>1126</u>
19	<u>1224</u>
20	<u>1233</u>
21	<u>1244</u>
22	<u>1245</u>
23	<u>1240</u>
24	<u>1241</u>
25	<u>1248</u>
26	<u>1251</u>
27	<u>1248</u>
28	<u>1256</u>
29	<u>1251</u>
30	<u>1250</u>
31	<u>1247</u>

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-499  
 UNIT 2  
 DATE Jan. 3, 1991  
 COMPLETED BY A.P. Kent  
 TELEPHONE 512/972-7786

REPORT MONTH DECEMBER

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
90-13	900929	S	233.9	C	4	N/A	N/A	N/A	Refueling and scheduled maintenance outage.
90-14	901211	S	1.2	B	9	N/A	N/A	N/A	Turbine overspeed trip test.

<sup>1</sup>F: Forced  
 S: Scheduled

<sup>2</sup>Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Exam  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

<sup>3</sup>Method:  
 1-Manual  
 2-Manual Scram  
 3-Automatic Scram  
 4-Cont. of Existing Outage  
 5-Reduction  
 9-Other

<sup>4</sup>IEEE 805-1983

<sup>5</sup>IEEE 803A-1983

ATTACHMENT 2  
 ST-HL-AE-3665  
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PORVs and Safety Valves Summary

There were no PORV or Safety Valves challenged during the reporting period.