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

January 14, 1992
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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, 1991

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, 1991.

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

William J. Jump
Manager
Nuclear Licensing

MKJ/lf

Attachments: 1) STPEGS Unit 1 Monthly Operating Report - December, 1991
2) STPEGS Unit 2 Monthly Operating Report - December, 1991

cc:

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Revised 10/11/91

L4/NRC/

SOUTH TEXAS PROJECT

ELECTRIC GENERATING STATION

UNIT 1

MONTHLY OPERATING REPORT

DECEMBER 1991

HOUSTON LIGHTING AND POWER CO.

NRC DOCKET NO. 50-498

LICENSE NO. NPF-76

Reviewed By: _____ 1-6-92
Supervisor Date

Reviewed By: D.C. Logan 1-7-92
Plant Engineering Manager Date

Approved By: _____ 1/9/92
Plant Manager Date

Monthly Summary

STPEGS Unit 1 began the reporting period at 100% reactor power.

On 12/7/91 reactor power was reduced to allow repair of the Main Feedwater Pump Speed Control Circuit.

The unit returned to 100% reactor power on 12/8/91 and operated for the remainder of the reporting period with no shutdowns or significant power reductions.

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OPERATING DATA REPORT

DOCKET NO. 50-498
UNIT 1
DATE Jan. 3, 1992
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	744.0	6238.9	20019.9
6.	REACTOR RESERVE SHUTDOWN HOURS	0	0	0
7.	HOURS GENERATOR ON LINE	744.0	6070.8	19212.3
8.	UNIT RESERVE SHUTDOWN HOURS	0	0	0
9.	GROSS THERMAL ENERGY GENERATED (MWt)	2762897	22476114	70154322
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	941970	7610510	23708000
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	901694	7203886	22328369
12.	REACTOR SERVICE FACTOR	100.0%	71.2%	68.1%
13.	REACTOR AVAILABILITY FACTOR	100.0%	71.2%	68.1%
14.	UNIT SERVICE FACTOR	100.0%	69.3%	65.4%
15.	UNIT AVAILABILITY FACTOR	100.0%	69.3%	65.4%
16.	UNIT CAPACITY FACTOR (Using MDC)	96.9%	65.8%	60.8%
17.	UNIT CAPACITY FACTOR (Using Design MWe)	96.9%	65.8%	60.8%
18.	UNIT FORCED OUTAGE RATE	0.0%	11.4%	14.3%

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):

    N/A

20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: N/A

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-498
UNIT 1
DATE Jan. 6, 1992
COMPLETED BY A.P. Kent
TELEPHONE 512/972-7786

MONTH DECEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1223	17	1254
2	1247	18	1246
3	1, 8	19	1245
4	1245	20	1244
5	1238	21	1243
6	1244	22	1240
7	397	23	1242
8	1025	24	1247
9	1246	25	1242
10	1244	26	1248
11	1238	27	1254
12	1232	28	1257
13	1239	29	1260
14	1253	30	1260
15	1254	31	1260
16	1256		

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-498
UNIT 1
DATE Jan. 3, 1992
COMPLETED BY A.P. Kent
TELEPHONE 512/972-7786

REPORT MONTH DECEMBER

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report #	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
91-11	911207	F	0.0	B	5	N/A	SJ	P	Reactor power was reduced to 20% to allow repair of the Main Feedwater Pump Speed Control Circuit.

[1] F: Forced
S: Scheduled

[2] 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)

[3] Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Cont. of Existing Outage
5-Reduction
9-Other

[4] IEEE 805-1983

[5] IEEE 803A-1983

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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 1991

HOUSTON LIGHTING AND POWER CO.

NRC DOCKET NO. 50-499

LICENSE NO. NPF-80

Reviewed By: _____ 1-6-92
Supervisor Date

Reviewed By: _____ 1-7-92
Plant Engineering Manager Date

Approved By: _____ 1/9/92
Plant Manager Date

Monthly Summary

STPEGS Unit 2 began the reporting period shutdown for refueling and scheduled maintenance. Due to corrective maintenance work on equipment required for start-up, the refueling outage was extended beyond the original scheduled start-up date of December 5, 1991. December 6, 1991 marked the beginning of forced shutdown time accrued to the unit.

The generator was synchronized to the grid on 12/16/91 at 0129 and the Turbine Overspeed Trip Test was performed successfully. The unit remained off line when problems were experienced with the Main Generator Seal Oil System not controlling pressure properly. The unit was taken to Mode 2 to implement corrective action. It was discovered that some relief valves were incorrectly set and that an air side filter was installed backward causing high backpressure to develop and a relief valve to lift. The lifting of the relief valve prevented adequate pressure from being developed in the seals and a subsequent loss of hydrogen pressure in the generator. The filter was reversed.

The unit was returned to service for normal operation on 12/18/91 at 1852. On 12/22/91 reactor power was reduced to 12% to correct feedwater flow oscillations occurring on the 2B Steam Generator loop. The oscillations were caused by a bad positioner on a feedwater regulating valve.

On 12/24/91 with the unit at 30% reactor power and ramping up, a reactor trip and safety injection occurred due to low pressurizer pressure. The pressurizer spray valve on the 2A Reactor Coolant loop failed. The positioner arm from the spray valve had fallen off because of a loose support bolt/nut arrangement. The positioner arm was replaced.

With the unit in Mode 2, while attempting to transfer to governor valve control, the Electro-Hydraulic Control System responded incorrectly causing a turbine trip on 12/26/91. Investigations revealed no significant problems. Throttle and governor valve testing was performed with satisfactory results on 12/27/91.

The unit achieved Mode 1 on 12/27/91 at 0641 and was synchronized to the grid on 12/28/91 at 0129. The unit concluded the reporting period at 100% reactor power.

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OPERATING DATA REPORT

DOCKET NO. 50-499
UNIT 2
DATE Jan. 4, 1992
COMPLETED BY A.P. Kent
TELEPHONE 512/972-7786

OPERATING STATUS

1. REPORTING PERIOD: 12/0 -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.....	449.3	6441.3	15422.6
6.	REACTOR RESERVE SHUTDOWN HOURS.....	0	0	0
7.	HOURS GENERATOR ON LINE.....	247.1	6136.6	14482.2
8.	UNIT RESERVE SHUTDOWN HOURS.....	0	0	0
9.	GROSS THERMAL ENERGY GENERATED (MWt).....	553038	22688003	52393271
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)..	154310	7644890	17667360
11.	NET ELECTRICAL ENERGY GENERATED (MWH)....	120528	7255235	16704003
12.	REACTOR SERVICE FACTOR.....	60.4%	73.5%	69.4%
13.	REACTOR AVAILABILITY FACTOR.....	60.4%	73.5%	69.4%
14.	UNIT SERVICE FACTOR.....	33.2%	70.1%	65.2%
15.	UNIT AVAILABILITY FACTOR.....	33.2%	70.1%	65.2%
16.	UNIT CAPACITY FACTOR (Using MDC).....	13.0%	66.2%	60.1%
17.	UNIT CAPACITY FACTOR (Using Design MWe)..	13.0%	66.2%	60.1%
18.	UNIT FORCED OUTAGE RATE.....	60.4%	9.3%	16.4%

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH):

    N/A

20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: N/A

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-499
UNIT 2
DATE Jan. 6, 1992
COMPLETED BY A.P. Kent
TELEPHONE 512/972-7786

MONTH DECEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	171
4	0	20	528
5	0	21	876
6	0	22	439
7	0	23	51
8	0	24	44
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	372
13	0	29	1005
14	0	30	1159
15	0	31	1209
16	10		

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-499
UNIT 2
DATE Jan. 6, 1992
COMPLETED BY A.P. Kent
TELEPHONE 512/97[illegible]7786

REPORT MONTH DECEMBER

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report #	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
91-07	910914	S	120.0	C	4	N/A	N/A	N/A	Refueling and scheduled maintenance outage.
91-08	911206	F	241.5	B	9	N/A	N/A	N/A	Corrective maintenance work on equipment required for start-up.
91-09	911216	F	54.7	B	5	N/A	TB	FLT	The Main Generator Seal Oil System was not controlling pressure properly during Main Turbine testing. It was discovered that some pressure relief valves were incorrectly set and that an air side filter was installed backwards causing high backpressure to develop and a relief valve to lift. The lifting of the relief valve prevented adequate pressure from being developed at the seals and a subsequent loss of hydrogen pressure in the generator. The filter was reversed.

[1] F: Forced
S: Scheduled

[2] 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)

[3] Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Cont. of Existing Outage
5-Reduction
9-Other

[4] IEEE 805-1983

[5] IEEE 803A-1983

ATTACHMENT 2
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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-499
UNIT 2
DATE Jan. 6, 1992
COMPLETED BY A.P. Kent
TELEPHONE 512/972-7786

REPORT MONTH DECEMBER

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report #	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
91-10	911224	F	80.7	A	3	2-91-010	AB	SPT	Reactor trip and safety injection occurred due to low pressurizer pressure. The pressurizer spray valve off of the 2A Reactor Coolant loop failed due to a positioner arm from the spray valve falling off because of a loose support bolt/nut arrangement. The positioner arm was replaced and its support supplemented by using a lock washer and a series of nuts. Corrective action to prevent recurrence will be discussed in the LER. With the unit in Mode 2, while attempting to transfer to governor valve control, the Electro-Hydraulic Control System responded incorrectly causing a turbine trip. Investigation revealed no significant problems. Throttle and governor valve testing was performed with satisfactory results.

[1] F: Forced
S: Scheduled

[2] 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)

[3] Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Cont. of Existing Outage
5-Reduction
9-Other

[4] IEEE 805-1983

[5] IEEE 803A-1983

ATTACHMENT 2
ST-HL-AE-3973
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PORVs and Safety Valves Summary

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