

The Light company

Houston Lighting & Power

South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

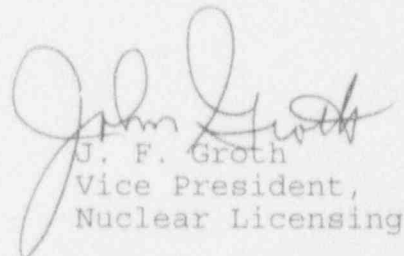
April 15, 1994
ST-HL-AE-4774
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10CFR50.71

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

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Monthly Operating Reports for March 1994

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 March 1994.

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


J. F. Groth
Vice President,
Nuclear Licensing

MKJ/esh

- Attachments: 1) STPEGS Unit 1 Monthly Operating Report - March
1994
- 2) STPEGS Unit 2 Monthly Operating Report - March
1994

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

JEH

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U. S. Nuclear Regulatory Comm.
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Washington, D. C. 20555

SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
UNIT 1
MONTHLY OPERATING REPORT
MARCH 1994
HOUSTON LIGHTING AND POWER CO.
NRC DOCKET NO. 50-498
LICENSE NO. NPF-76

Reviewed [Signature] A.R. Cope 4/11/94
Supervisor Date

Reviewed By: AC Malutz 4/11/94
Engineering Manager Date

Approved by: [Signature] 4/13/94
Plant Manager Date

Monthly Summary

ATTACHMENT 1
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STPEGS Unit 1 began the reporting period in Mode 3. A root-cause analysis was being performed due to a manual reactor trip event that occurred on 2/28/94.

The unit was in the power ascension testing program, operating at 29% reactor power, when a manual reactor trip was initiated due to dropping water level in the 1D Steam Generator. The event was caused by a malfunctioning 1D Main Feedwater Regulating Valve (MFRV). This prevented the reactor operator from taking remote manual control of the level in the 1D Steam Generator.

The malfunctioning 1D MFRV was caused by a failed transformer coil in the torque motor in the current to pneumatic converter. This resulted in the closure of the 1D MFRV and subsequent loss of feedwater flow to 1D Steam Generator. The failed converter was replaced.

Following the unit's removal from service on 2/28/94, a small leak was discovered from the primary to the secondary side of the 1C Steam Generator. The unit was taken to Mode 5 on 3/4/94 to facilitate the location and repair of the leak.

The unit was returned to service on 3/22/94 at 1731 and concluded the reporting period operating at 77% reactor power with the power ascension testing program ongoing.

OPERATING DATA REPORT

DOCKET NO. 50-498
 UNIT 1
 DATE Apr. 5, 1994
 COMPLETED BY R.L. Hill
 TELEPHONE 512/972-7667

OPERATING STATUS

1. REPORTING PERIOD: 03/01/94-03/31/94 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>263.9</u>	<u>525.7</u>	<u>27398.3</u>
6.	REACTOR RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
7.	HOURS GENERATOR ON LINE.....	<u>222.5</u>	<u>309.5</u>	<u>26233.3</u>
8.	UNIT RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
9.	GROSS THERMAL ENERGY GENERATED (MWt).....	<u>463078</u>	<u>545892</u>	<u>95211400</u>
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)..	<u>148780</u>	<u>161060</u>	<u>32175720</u>
11.	NET ELECTRICAL ENERGY GENERATED (MWH)....	<u>136421</u>	<u>144881</u>	<u>30404425</u>
12.	REACTOR SERVICE FACTOR.....	<u>35.5%</u>	<u>24.3%</u>	<u>55.8%</u>
13.	REACTOR AVAILABILITY FACTOR.....	<u>35.5%</u>	<u>24.3%</u>	<u>55.8%</u>
14.	UNIT SERVICE FACTOR.....	<u>29.9%</u>	<u>14.3%</u>	<u>53.4%</u>
15.	UNIT AVAILABILITY FACTOR.....	<u>29.9%</u>	<u>14.3%</u>	<u>53.4%</u>
16.	UNIT CAPACITY FACTOR (Using MDC).....	<u>14.7%</u>	<u>5.4%</u>	<u>49.5%</u>
17.	UNIT CAPACITY FACTOR (Using Design MWe)..	<u>14.7%</u>	<u>5.4%</u>	<u>49.5%</u>
18.	UNIT FORCED OUTAGE RATE.....	<u>70.1%</u>	<u>85.6%</u>	<u>35.1%</u>
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

ATTACHMENT 1
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DOCKET NO. 50-498
 UNIT 1
 DATE Apr. 5, 1994
 COMPLETED BY R.L. Hill
 TELEPHONE 512/972-7667

MONTH MARCH

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	10
23	267
24	500
25	516
26	515
27	521
28	594
29	854
30	948
31	960

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-498
 UNIT 1
 DATE Apr. 5, 1994
 COMPLETED BY R.L. Hill
 TELEPHONE 512/972-7667

REPORT MONTH MARCH

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
94-02	940228	F	521.5	A	4	1-94-009	JB	FCV	<p>The unit was manually tripped from 29% reactor power due to dropping water level in the 1D Steam Generator. The event was caused by the malfunctioning of the 1D Main Feedwater Regulating Valve (MFRV). This prevented the reactor operator from taking remote manual control of the level in the 1D Steam Generator.</p> <p>The malfunctioning 1D MFRV was caused by a failed coil in the torque motor in the current to pneumatic converter. This resulted in the closure of the 1D MFRV and subsequent loss of feedwater flow to the 1D Steam Generator.</p> <p>The failed 1D MFRV current to pneumatic converter was replaced. The 1A MFRV converter had been previously replaced and can be expected to operate reliably.</p>

¹
 F: Forced
 S: Scheduled

²
 Reason:
 A-Equipment Failure (Explain)
 E-Maintenance or Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & License Exam
 F-Administrative
 G-Operational Error (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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UNIT SHUTDOWNS AND POWER REDUCTIONS

LOCKET NO. 50-498
 UNIT 1
 DATE Apr. 5, 1994
 COMPLETED BY R.L. Hill
 TELEPHONE 512/972-7667

REPORT MONTH MARCH

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
									<p>The 1B and 1C MFRV converters were replaced since there was no history of previous replacements.</p> <p>The failed 1D converter and the associated controller driver card, that had failed prior to the event, were returned to their respective manufacturers for failure analysis.</p> <p>All four Unit 2 MFRV current to pneumatic converters will be replaced to improve the reliability of the valves.</p> <p>After Unit 1 was removed from service, due to the manual trip, a small leak was discovered from the primary to the secondary side of the 1C Steam Generator. Eddy current data indicated one repair was needed to a previously identified leaking tube plug.</p>

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 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)

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

ATTACHMENT 1
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There were no PORV or Safety Valves challenged during the reporting period.

SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
UNIT 2
MONTHLY OPERATING REPORT
MARCH 1994
HOUSTON LIGHTING AND POWER CO.
NRC DOCKET NO. 50-499
LICENSE NO. NPF-80

Reviewed By: *[Signature]* 4/11/94
Supervisor Date

Reviewed By: *[Signature]* 4/11/94
Engineering Manager Date

Approved By: *[Signature]* 4/12/94
Plant Manager Date

Monthly Summary

ATTACHMENT 2
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STPEGS Unit 2 experienced an automatic reactor scram during February 1993 and subsequently remained shutdown due to auxiliary feedwater system component failures. While the unit was shutdown, corrective maintenance was performed and organizational and work process changes were implemented.

Upon the resolution of the auxiliary feedwater system component failures and the additional issues, efforts were resumed on the refueling and scheduled maintenance outage.

The energy losses for the unit are unplanned, except for the period between February 27 and May 23, 1993, which was the previously scheduled outage period for the unit.

The unit will not be taken critical until the self-assessment process as presented by the Operational Readiness Plan is completed. The self-assessment process will evaluate and determine the acceptability of continued operation at specific milestones.

OPERATING DATA REPORT

DOCKET NO. 50-499
 UNIT 2
 DATE Apr. 5, 1994
 COMPLETED BY R.L. Hill
 TELEPHONE 512/972-7667

OPERATING STATUS

1. REPORTING PERIOD: 03/01/94-03/31/94 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>0</u>	<u>24756.2</u>
6. REACTOR RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE.....	<u>0</u>	<u>0</u>	<u>23733.8</u>
8. UNIT RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (Mwt).....	<u>0</u>	<u>0</u>	<u>86433521</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH).....	<u>0</u>	<u>0</u>	<u>29204590</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH).....	<u>0</u>	<u>0</u>	<u>27735279</u>
12. REACTOR SERVICE FACTOR.....	<u>0.0%</u>	<u>0.0%</u>	<u>59.0%</u>
13. REACTOR AVAILABILITY FACTOR.....	<u>0.0%</u>	<u>0.0%</u>	<u>59.0%</u>
14. UNIT SERVICE FACTOR.....	<u>0.0%</u>	<u>0.0%</u>	<u>56.6%</u>
15. UNIT AVAILABILITY FACTOR.....	<u>0.0%</u>	<u>0.0%</u>	<u>56.6%</u>
16. UNIT CAPACITY FACTOR (Using MDC).....	<u>0.0%</u>	<u>0.0%</u>	<u>52.9%</u>
17. UNIT CAPACITY FACTOR (Using Design MWe).....	<u>0.0%</u>	<u>0.0%</u>	<u>52.9%</u>
18. UNIT FORCED OUTAGE RATE.....	<u>100.0%</u>	<u>100.0%</u>	<u>32.1%</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>05/23/94</u>		

AVERAGE DAILY UNIT POWER LEVEL

ATTACHMENT 2
ST-HL-AE-4174
PAGE 4 OF 6

DOCKET NO. 50-499
UNIT 2
DATE Apr. 5, 1994
COMPLETED BY R.L. Hill
TELEPHONE 512/972-7667

MONTH MARCH

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. 50-499
 UNIT 2
 DATE Apr. 5, 1994
 COMPLETED BY R.L. Hill
 TELEPHONE 512/972-7667

REPORT MONTH MARCH

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
93-07	930524	F	744.0	F	4	N/A	N/A	N/A	Upon the resolution of the auxiliary feedwater system corrective actions and additional issues, the refueling and scheduled maintenance outage was resumed.

¹
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 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-4714
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PORVs and Safety Valves Summary

ATTACHMENT 2
ST-HL-AE-4194
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There were no PORV or Safety Valves challenged during the reporting period.