

# The Light company

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

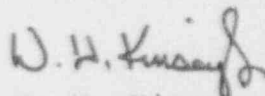
March 15, 1993  
ST-HL-AE-4366  
File No.: G02  
10CFR50.71

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

South Texas Project  
Units 1 & 2  
Docket Nos. STN 50-498 & 50-499  
Monthly Operating Reports for February, 1993

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 February, 1993.

If you should have any questions on this matter, please contact Mr. J. M. Pinzon at (512) 972-8027.

  
W. H. Kinsey, Jr.  
Vice President,  
Nuclear Generation

MKJ/pa

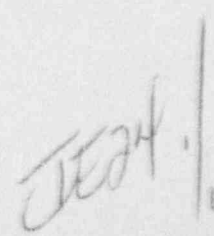
Attachments: 1) STPEGS Unit 1 Monthly Operating Report -  
February, 1993  
2) STPEGS Unit 2 Monthly Operating Report -  
February, 1993

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Houston Lighting & Power Company  
South Texas Project Electric Generating Station

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C:

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U.S. Nuclear Regulatory Comm.  
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SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
UNIT 1  
MONTHLY OPERATING REPORT  
FEBRUARY 1993  
HOUSTON LIGHTING AND POWER CO.  
NRC DOCKET NO. 50-498  
LICENSE NO. NPF-76

Reviewed By: [Signature] 3-5-93  
Supervisor Date  
Reviewed By: [Signature] 3/9/93  
Plant Engineering Manager Date  
Approved By: [Signature] 3/10/93  
Plant Manager Date

Monthly Summary

STPEGS Unit 1 began the reporting period at 81 percent reactor power, increasing to 98 percent to continue power ascension testing.

On February 4, the unit was shutdown due to the inability to return Turbine-Driven Auxiliary Feedwater Pump (TDAFWP) 14 to an operable status within the technical specification allowed time. On February 1, during the performance of a surveillance test, TDAFWP 14 tripped on overspeed. This resulted in the pump being declared inoperable and the unit entering a 72 hour action statement. On February 3, Unit 2 experienced a reactor trip during which TDAFWP 24 tripped on overspeed. Since the 72 hour allowed time was due to expire soon and the cause of the Unit 2 overspeed had not been determined, the decision to shutdown the unit was made.

The unit concluded the reporting period with corrective maintenance ongoing.

OPERATING DATA REPORT

DOCKET NO. 50-498  
UNIT 1  
DATE Mar. 5, 1993  
COMPLETED BY A.P. KENT  
TELEPHONE 512/972-7786

OPERATING STATUS

1. REPORTING PERIOD: 02/01-02/28 GROSS HOURS IN REPORTING PERIOD: 672
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>86.8</u>	<u>720.1</u>	<u>26872.6</u>
6. REACTOR RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE.....	<u>86.4</u>	<u>677.1</u>	<u>25923.8</u>
8. UNIT RESERVE SHUTDOWN HOURS.....	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWt).....	<u>309269</u>	<u>2075013</u>	<u>94665508</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..	<u>106310</u>	<u>703090</u>	<u>32014660</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)....	<u>101127</u>	<u>666033</u>	<u>30259544</u>
12. REACTOR SERVICE FACTOR.....	<u>12.9%</u>	<u>50.9%</u>	<u>67.9%</u>
13. REACTOR AVAILABILITY FACTOR.....	<u>12.9%</u>	<u>50.9%</u>	<u>67.9%</u>
14. UNIT SERVICE FACTOR.....	<u>12.9%</u>	<u>47.8%</u>	<u>65.5%</u>
15. UNIT AVAILABILITY FACTOR.....	<u>12.9%</u>	<u>47.8%</u>	<u>65.5%</u>
16. UNIT CAPACITY FACTOR (Using MDC).....	<u>12.0%</u>	<u>37.6%</u>	<u>61.1%</u>
17. UNIT CAPACITY FACTOR (Using Design MWe)..	<u>12.0%</u>	<u>37.6%</u>	<u>61.1%</u>
18. UNIT FORCED OUTAGE RATE.....	<u>87.1%</u>	<u>52.2%</u>	<u>16.1%</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: 3/20/93			

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-498  
UNIT 1  
DATE Mar. 5, 1993  
COMPLETED BY A.P. Kent  
TELEPHONE 512/972-7786

MONTH FEBRUARY

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	1152
2	1237
3	1237
4	588
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	N/A
30	N/A
31	N/A



## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-498UNIT 1DATE Mar. 5, 1993COMPLETED BY A. P. KentTELEPHONE 512/972-7786REPORT MONTH FEBRUARY

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
93-05	930204	F	585.6	A	1	1-93-007	BA	P	The unit was removed from service and shutdown due to the inability to return Turbine-Driven Auxiliary Feedwater Pump (TDAFWP) 14 to an operable status within the technical specification allowed time. On February 1, during the performance of a surveillance test, TDAFWP 14 tripped on overspeed. This resulted in the pump being declared inoperable and the unit entering a 72 hour action statement. On February 3, Unit 2 experienced a reactor trip during which TDAFWP 24 tripped on overspeed. Since the 72 hour allowed time was due to expire soon and the cause of the Unit 2 overspeed had not been determined, the decision to shutdown the unit was made. The cause of the overspeed events was water intrusion into the TDAFWP adversely affecting performance.

<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  
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## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-498  
 UNIT 1  
 DATE Mar. 5, 1993  
 COMPLETED BY A.P. Fent  
 TELEPHONE 512/972-7786

REPORT MONTH FEBRUARY

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
									Corrective actions include extensive testing, analysis, and component examination to determine the causes of overspeed trips on TDAFWP 14 and 24. Additional corrective actions are described in the LER.

<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


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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  
FEBRUARY 1993  
HOUSTON LIGHTING AND POWER CO.  
NRC DOCKET NO. 50-499  
LICENSE NO. NPF-80

Reviewed By: 

Supervisor

3-5-93  
Date

Reviewed By: 

Plant Engineering Manager

3/9/93  
Date

Approved By: 

Plant Manager

3/10/93  
Date

Monthly Summary

STPEGS Unit 2 began the reporting period at 100% reactor power.

On February 3 an automatic reactor trip occurred due to low steam generator water level. The low water level was caused by a loss of steam driven feedwater pump 21 in conjunction with a failure of the startup feedwater pump due to low oil pressure.

The unit concluded the reporting period shutdown with corrective maintenance ongoing.

OPERATING DATA REPORT

DOCKET NO. 50-499  
UNIT 2  
DATE Mar. 5, 1993  
COMPLETED BY A.P. Kent  
TELEPHONE 512/972-7786

OPERATING STATUS

1. REPORTING PERIOD: 02/01-02/28 GROSS HOURS IN REPORTING PERIOD: 672
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.....	63.4	739.5	24756.2
6. REACTOR RESERVE SHUTDOWN HOURS.....	0	0	0
7. HOURS GENERATOR ON LINE.....	63.4	702.5	23733.8
8. UNIT RESERVE SHUTDOWN HOURS.....	0	0	0
9. GROSS THERMAL ENERGY GENERATED (MWt).....	242486	2231021	86433521
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)..	80680	729470	29204590
11. NET ELECTRICAL ENERGY GENERATED (MWH)....	76962	690299	27735279
12. REACTOR SERVICE FACTOR.....	9.4%	52.2%	76.3%
13. REACTOR AVAILABILITY FACTOR.....	9.4%	52.2%	76.3%
14. UNIT SERVICE FACTOR.....	9.4%	49.6%	73.2%
15. UNIT AVAILABILITY FACTOR.....	9.4%	49.6%	73.2%
16. UNIT CAPACITY FACTOR (Using MDC).....	9.2%	39.0%	68.4%
17. UNIT CAPACITY FACTOR (Using Design MWe)..	9.2%	39.0%	68.4%
18. UNIT FORCED OUTAGE RATE.....	90.6%	50.4%	13.8%
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH):	Scheduled 85 day refueling outage to begin March 2, 1993.		
20. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 5/23/93			

AVERAGE DAILY UNIT POWER LEVEL

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DOCKET NO. 50-499  
UNIT 2  
DATE Mar. 5, 1993  
COMPLETED BY A. P. Kent  
TELEPHONE 512/972-7786

MONTH FEBRUARY

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	1223
2	1220
3	764
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	N/A
30	N/A
31	N/A

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-499  
 UNIT 2  
 DATE Mar. 5, 1993  
 COMPLETED BY A.P. Kent  
 TELEPHONE 512/972-7786

REPORT MONTH FEBRUARY

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
93-05	930203	F	608.6	A	3	2-93-004	SJ	P	<p>The unit experienced an automatic reactor trip due to low steam generator water level. The low water level was caused by the loss of steam driven feedwater pump 21 in conjunction with a failure of the startup feedwater pump due to low oil pressure.</p> <p>Corrective actions include troubleshooting and repairing the startup feedwater pump and steam driven feedwater pump. Modifications to improve the reliability of the steam driven feedwater pumps and startup feedwater pumps will be implemented. Additional corrective actions are described in the LER.</p>

<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



PORVs and Safety Valves Summary

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