



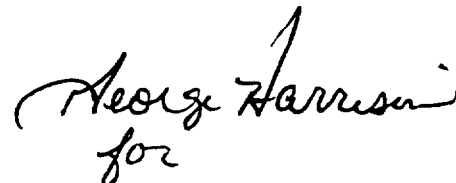
South Texas Project Nuclear Operating Company P.O. Box 289 Wadsworth, Texas 77483

February 13, 2003  
NOC-AE-03001466  
File No.: G02  
10CFR50.71  
STI: 31556984

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
Monthly Operating Reports for January 2003

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 January 2003. If you should have any questions on this matter, please contact R.L. Hill at (361) 972-7667.

  
for  
F.H. Mallen  
Manager, Planning &  
Controls

- Attachments: 1) STPEGS Unit 1 Monthly Operating Report – January 2003  
2) STPEGS Unit 2 Monthly Operating Report – January 2003

IE24

cc:

(paper copy)

Ellis W. Merschoff  
Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011-8064

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

Richard A. Ratliff  
Bureau of Radiation Control  
Texas Department of Health  
1100 West 49th Street  
Austin, TX 78756-3189

Cornelius F. O'Keefe  
U. S. Nuclear Regulatory Commission  
P. O. Box 289, Mail Code: MN116  
Wadsworth, TX 77483

C. M. Canady  
City of Austin  
Electric Utility Department  
721 Barton Springs Road  
Austin, TX 78704

(electronic copy)

A. H. Gutterman, Esquire  
Morgan, Lewis & Bockius LLP

M. T. Hardt/W. C. Gunst  
City Public Service

Mohan C. Thadani  
U. S. Nuclear Regulatory Commission

R. L. Balcom/D. G. Tees  
Texas Genco, LP

A. Ramirez  
City of Austin

C. A. Johnson/A. C. Bakken III  
AEP - Central Power and Light Company

Jon C. Wood  
Matthews & Branscomb

SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
UNIT 1  
MONTHLY OPERATING REPORT  
JANUARY 2003  
STP NUCLEAR OPERATING COMPANY  
NRC DOCKET NO. 50-498  
LICENSE NO. NPF-76

Approved By:

  
E.D. HALPIN

  
Date

## MONTHLY SUMMARY

South Texas Project Unit 1 operated during the reporting period at full power with no unit shutdowns or significant power reductions.

## OPERATING DATA REPORT

DOCKET NO. 50-498  
 UNIT 1  
 DATE Feb. 11, 2003  
 COMPLETED BY R L Hill  
 TELEPHONE 361.972.7667

### OPERATING STATUS

1. REPORTING PERIOD: 1/1/03-1/31/03 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (Mwt): 3,853  
 MAXIMUM DEPENDABLE CAPACITY (MWe-Net): 1,250.6  
 DESIGN ELECTRICAL RATING (MWe-Net): 1,250.6
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 CRITICAL	<u>744.0</u>	<u>744.0</u>	<u>99,273.1</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE	<u>744.0</u>	<u>744.0</u>	<u>97,637.1</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>2,839,482</u>	<u>2,839,482</u>	<u>364,789,945</u>
10. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>953,247</u>	<u>953,247</u>	<u>119,169,302</u>
11. REACTOR SERVICE FACTOR (%)	<u>100.0</u>	<u>100.0</u>	<u>78.4</u>
12. REACTOR AVAILABILITY FACTOR (%)	<u>100.0</u>	<u>100.0</u>	<u>78.4</u>
13. UNIT SERVICE FACTOR (%)	<u>100.0</u>	<u>100.0</u>	<u>77.2</u>
14. UNIT AVAILABILITY FACTOR (%)	<u>100.0</u>	<u>100.0</u>	<u>77.2</u>
15. UNIT CAPACITY FACTOR - Using MDC (%)	<u>102.5</u>	<u>102.5</u>	<u>75.3</u>
16. UNIT CAPACITY FACTOR - Using DER (%)	<u>102.5</u>	<u>102.5</u>	<u>75.3</u>
17. UNIT FORCED OUTAGE RATE (%)	<u>0.0</u>	<u>0.0</u>	<u>13.3</u>

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

Scheduled 25-day outage to allow scheduled refueling to begin on March 26, 2003.

19. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: N/A

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-498  
UNIT 1  
DATE Feb. 11, 2003  
COMPLETED BY R.L. Hill  
TELEPHONE 361.972.7667

## MONTH JANUARY

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>1286</u>	17	<u>1262</u>
2	<u>1286</u>	18	<u>1261</u>
3	<u>1287</u>	19	<u>1266</u>
4	<u>1287</u>	20	<u>1276</u>
5	<u>1289</u>	21	<u>1275</u>
6	<u>1285</u>	22	<u>1283</u>
7	<u>1286</u>	23	<u>1285</u>
8	<u>1287</u>	24	<u>1283</u>
9	<u>1285</u>	25	<u>1282</u>
10	<u>1287</u>	26	<u>1283</u>
11	<u>1286</u>	27	<u>1284</u>
12	<u>1282</u>	28	<u>1284</u>
13	<u>1282</u>	29	<u>1284</u>
14	<u>1278</u>	30	<u>1284</u>
15	<u>1284</u>	31	<u>1283</u>
16	<u>1266</u>		

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-498  
 UNIT 1  
 DATE Feb. 11, 2003  
 COMPLETED BY R.L. Hill  
 TELEPHONE 361 972.7667

### REPORT MONTH JANUARY

No.	Date	1 Type	Duration (Hours)	2 Reason	3 Method of Shutting Down Reactor	Licensee Event Report #	4 System Code	5 Component Code	Cause & Corrective Action to Prevent Recurrence
THERE WERE NO UNIT SHUTDOWNS OR SIGNIFICANT POWER REDUCTIONS DURING THE REPORTING PERIOD									

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 803-1983

## **PORVS AND SAFETY VALVE SUMMARY**

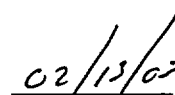
There were no PORV or Safety Valves challenged during the reporting period.



SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
UNIT 2  
MONTHLY OPERATING REPORT  
JANUARY 2003  
STP NUCLEAR OPERATING COMPANY  
NRC DOCKET NO. 50-499  
LICENSE NO. NPF-80

Approved By.

  
E.D. HALPIN

  
Date

## MONTHLY SUMMARY

South Texas Project Unit 2 began the reporting period shutdown. On December 15, at 1805 the reactor was manually tripped due to a sudden high main turbine vibration. After opening the turbine and condenser, one last row blade on low-pressure (LP) rotor 22 had separated from the rotor causing some collateral damage within LP 22. Numerous last row blade cracks were discovered during visual inspections of the blades on LP 22 and 23. Additional damage was found on stationary blades in 22, the exhaust flow guide and some condenser tubes. Metallurgical examinations found the cracks as a result of high cycle fatigue.

Following repairs, the unit was returned to service on January 22, at 0422 using a special test procedure for turbine vibration data collection. Full power was achieved on January 23, at 1502. On January 24, at 2140 the main turbine/generator was removed from service due to excessive vibration.

The unit concluded the reporting period in Mode 5 with the secondary plant secured in order to facilitate continued repairs on the main turbine/generator rotor train.

## OPERATING DATA REPORT

DOCKETNO. 50-499  
 UNIT 2  
 DATE Feb. 11, 2003  
 COMPLETED BY R.L. Hill  
 TELEPHONE 361.972.7667

### OPERATING STATUS

1. REPORTING PERIOD: 1/1/03-1/31/03 GROSS HOURS IN REPORTING PERIOD. 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 3,853  
 MAXIMUM DEPENDABLE CAPACITY (MWe-Net): 1,250.6  
 DESIGN ELECTRICAL RATING (MWe-Net): 1,250.6
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 CRITICAL	<u>80.3</u>	<u>80.3</u>	<u>94,638.0</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE	<u>65.3</u>	<u>65.3</u>	<u>92,357.7</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>155,001</u>	<u>155,001</u>	<u>344,568,652</u>
10. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>46,377</u>	<u>46,377</u>	<u>112,224,344</u>
11. REACTOR SERVICE FACTOR (%)	<u>10.8</u>	<u>10.8</u>	<u>79.3</u>
12. REACTOR AVAILABILITY FACTOR (%)	<u>10.8</u>	<u>10.8</u>	<u>79.3</u>
13. UNIT SERVICE FACTOR (%)	<u>8.8</u>	<u>8.8</u>	<u>77.4</u>
14. UNIT AVAILABILITY FACTOR (%)	<u>8.8</u>	<u>8.8</u>	<u>77.4</u>
15. UNIT CAPACITY FACTOR - Using MDC (%)	<u>5.0</u>	<u>5.0</u>	<u>75.2</u>
16. UNIT CAPACITY FACTOR - Using DER (%)	<u>5.0</u>	<u>5.0</u>	<u>75.2</u>
17. UNIT FORCED OUTAGE RATE (%)	<u>91.2</u>	<u>91.2</u>	<u>14.0</u>

18. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, & DURATION OF EACH): N/A

19. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 03/13/03

# AVERAGE DAILY UNIT POWER LEVEL

DOCKETNO. 50-499  
UNIT 2  
DATE Feb. 11, 2003  
COMPLETED BY R L Hill  
TELEPHONE 361.972.7667

## MONTH JANUARY

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>0</u>	17	<u>0</u>
2	<u>0</u>	18	<u>0</u>
3	<u>0</u>	19	<u>0</u>
4	<u>0</u>	20	<u>0</u>
5	<u>0</u>	21	<u>0</u>
6	<u>0</u>	22	<u>238</u>
7	<u>0</u>	23	<u>1115</u>
8	<u>0</u>	24	<u>580</u>
9	<u>0</u>	25	<u>0</u>
10	<u>0</u>	26	<u>0</u>
11	<u>0</u>	27	<u>0</u>
12	<u>0</u>	28	<u>0</u>
13	<u>0</u>	29	<u>0</u>
14	<u>0</u>	30	<u>0</u>
15	<u>0</u>	31	<u>0</u>
16	<u>0</u>		

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-499  
 UNIT 2  
 DATE Feb. 11, 2003  
 COMPLETED BY R.L. Hill  
 TELEPHONE 361.972.7667

### REPORT MONTH JANUARY

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
02-04	021215	F	508.4	A	2	02-02-005	TA	TRB	Reactor manually tripped due to a sudden high main turbine vibration. After opening the turbine and condenser, one last row blade on low-pressure (LP) rotor 22 had separated from the rotor causing some collateral damage within LP 22. Numerous last row blade cracks were discovered during visual inspections of the blades on LP 22 and 23. Additional damage was found on stationary blades in 22, the exhaust flow guide and some condenser tubes. Metallurgical examinations found the cracks as a result of high cycle fatigue.
03-01	030124	F	170.3	A	1	N/A	TA	TRB	Main turbine/generator removed from service due to excessive vibration.

**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 803-1983

## PORVS AND SAFETY VALVE SUMMARY

Pressurizer PORV 655A lifted due to high system pressure following the start of Reactor Coolant Pump (RCP) 2A. The PORV immediately reclosed after restoring pressurizer pressure to its normal band.

All RCPs lost power due to switchyard north Bus lockout on January 19, at 1255. RCP 2A was the first RCP restarted following the event. Reactor Coolant System (RCS) pressure was normal at 2235 psig, RCS pressurizer level was normal at 25 percent, but RCS temperature had cooled down to 551 degrees which is 16 degrees cooler than normal no-load temperature. Decay heat was extremely low following the steam generator replacement outage and forced outage turbine outage.

Prior to the pump start, the RCS was 16 degrees cooler than the steam generators due to low decay heat. The steam generator acted as a heat source upon pump start instead of a heat sink. This resulted in an increase in RCS temperature and a 12 percent increase in pressurizer level. The surge in the pressurizer squeezed the steam bubble, which rapidly increased pressure. The pressurizer pressure control system responded automatically with both spray valves. This resulted in the pressurizer spray water from RCP 2A short cycling through the 2D-spray valve and bypassing some of the spray water from the pressurizer common spray supply line.

The pump startup response is different than previous RCP starts following loss of offsite power events due to the low decay heat. In previous blackouts, the decay heat was sufficient to maintain the RCS temperature above the steam generators and the RCS and steam generators stayed thermally coupled through natural circulation flow.