

CP&L CO
 RUN DATE 05/05/98
 RUN TIME 12:31:43

PLANT PERFORMANCE DATA SYSTEM
 OPERATING DATA REPORT
 H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

PAGE 1 of 1
 RPD36-000

DOCKET NO. 050-0261
 COMPLETED BY DARRYL GARDNER
 TELEPHONE (803)857-1144

OPERATING STATUS

1. UNIT NAME: H. B. ROBINSON STEAM ELECTRIC PLANT (HBRSEP),
UNIT NO. 2
2. REPORTING PERIOD: APRIL 1998
3. LICENSED THERMAL POWER (MWT): 2300
4. NAMEPLATE RATING (GROSS MWE): 739.0
5. DESIGN ELECTRICAL RATING (NET MWE): 700.0
6. MAX DEPENDABLE CAPACITY (GROSS MWE): 700.0
7. MAX DEPENDABLE CAPACITY (NET MWE): 683.0
8. /*IF CHANGES OCCUR IN CAPACITY RATING (ITEMS 3 THROUGH 7) SINCE LAST REPORT,
GIVE REASONS:
9. POWER LEVEL TO WHICH RESTRICTED IF ANY (NET MWE):
10. REASONS FOR RESTRICTION, IF ANY:

NOTES:

	THIS MONTH	YR TO DATE	CUMUL ATIVE
11. HOURS IN REPORTING PERIOD	719.00	2879.00	238151.00
12. NUMBER OF HOURS REACTOR CRITICAL	379.67	1939.85	173225.86
13. REACTOR RESERVE SHUTDOWN HRS	.00	.00	3314.65
14. HOURS GENERATOR ON LINE	351.58	1910.73	169995.46
15. UNIT RESERVE SHUTDOWN HOURS	.00	.00	23.20
16. GROSS THERMAL ENERGY GEN. (MWH)	719024.16	4293301.44	353697345.12
17. GROSS ELEC. ENERGY GEN. (MWH)	235582.00	1425622.00	114943798.00
18. NET ELEC. ENERGY GENERATED (MWH)	219218.00	1353022.00	108742212.00
19. UNIT SERVICE FACTOR	48.87	66.37	71.38
20. UNIT AVAILABILITY FACTOR	48.87	66.37	71.39
21. UNIT CAP. FACTOR (USING MDC NET)	44.64	68.81	68.17
22. UNIT CAP. FACTOR (USING DER NET)	43.56	67.14	65.23
23. UNIT FORCED OUTAGE RATE	9.79	1.96	13.33

24. SHUTDOWNS SCHED. OVER NEXT 6 MONTHS (TYPE DATE AND DURATION OF EACH):
 REFUELING OUTAGE 18 ENDED 4/14/98 AT 1830 HOURS.

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF START UP: N/A

26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION): FORECAST ACHIEVED
- | | |
|----------------------|---------|
| INITIAL CRITICALITY | 9/20/70 |
| INITIAL ELECTRICITY | 9/70 |
| COMMERCIAL OPERATION | 3/7/71 |

9902050027 990128
 PDR ADDCK 05000261
 R PDR

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 050-0261
UNIT NAME HBRSEP, UNIT NO. 2
DATE 04/08/98
COMPLETED BY DARRYL GARDNER
TELEPHONE (803) 857-1144

REPORT MONTH: APRIL 1998

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
98-001	03/06/98	S	329.5	C	1		ZZ	ZZZZZZ	Scheduled Shutdown - RO-18
98-002	04/25/98	F	38.1	A	3	1998-03-00	HA	INSTRU	Trip due Governor Valves going closed. Valves closed due to impulse pressure control circuitry anomaly.

1

2

3

4

⁵ Exhibit 1 - Same Source

F: Forced
S: Scheduled

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

Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Other (Explain)

Exhibit G - Instructions
For Preparation of Data
Entry Sheets for Licensee
Event Report (LER) File
(NUREG-0161)

SUMMARY: The unit returned to power following RO-18 on 4/14/98 at 1830. Power ascension to 100% was completed on 4/18/98. A plant trip occurred on 4/25/98. Pressurizer Power Operated Relief Valve (PORV), PCV-455C, opened and closed during the shutdown. The unit returned to full power on 4/27/98, and operated at full power the remainder of the month.

STEAM GENERATOR TUBE INSPECTION REPORT

SUMMARY

This document summarizes the Steam Generator examination program and results of the inspection performed at the H. B. Robinson Steam Electric Plant, Unit No. 2 during refueling outage 18 in March - April, 1998.

Eddy current examinations were performed for the "B" and "C" Steam Generators which included inspections utilizing the Zetec bobbin probes and the Rotating Pancake Coil (RPC) probes which includes the Plus Point coil. Techniques used for detection and sizing were based upon EPRI qualified techniques. RPC/Plus Point examinations were performed for each Steam Generator on approximately 50% of the inlet (i.e., hot leg) side, historical manufacturing buff marks (MBM), 50% of the dents (i.e., greater than 2.0 volts in amplitude) at supports, and previous percentage outside diameter through wall indications. RPC examinations were also performed on suspect bobbin indications, and on 50% of the U-bend region of rows 1 and 2. An additional 11 tubes were examined in the U-bend region of "B" Steam Generator. Tubes that were inspected with bobbin probes in "C" Steam Generator were examined with the RPC/Plus Point coil on the hot leg at the top of tube sheet area. Steam Generator "B" had 63% of its tubes tested with the bobbin probe and 50% of its tubes tested at the top of tube sheet area. There were no tube indications which required plugging reported for the 1998 inspection; however, two tubes had responses corresponding to a loose part. A one-tube expansion around the two tubes was performed with both the bobbin probe and the RPC/Point Plus coil. There were no other tubes with loose part indications, nor was degradation detected on the two suspect or the surrounding tubes.

EXAMINATION RESULTS

The following summarizes the inspection of recorded indications. Each Steam Generator is individually listed.

"B" Steam Generator

Steam Generator "B" had no tubes with measurable percentage through-wall indications. Indications that may reveal a through-wall percentage with the bobbin probes were dispositioned by the Magnetic Rotating Pancake Coil and were found not to be flaw-like in nature.

A total of 167 dents were found at either support locations or free span.

Diagnostics determined that no flaw-like indications were present among the two supports which indicated a distorted support signal.

There were 379 Manufacturing Buff Marks recorded using the bobbin probe.

There were 32 indications categorized as non-quantifiable. Diagnostics determined that no flaw-like indications were present.

There were two tubes with indications of a possible loose part. Diagnostic testing confirmed the presence of a loose part signal response. Visual examination revealed a piece of wire that was adhered to the two tubes. Attempts to retrieve it were unsuccessful. An evaluation was completed that determined that the piece of wire could remain in the Steam Generator.

There was one tube indicating permeability variation.

"C" Steam Generator

Steam Generator "C" has three tubes that measured a percentage through-wall at the Anti-Vibration Bars (AVBs). These indications were also found in earlier outage inspections.

<u>Row/Column</u>	<u>Location</u>	<u>1998 Percentage</u>	<u>Previous Outage Percentage</u>
R35C61	2A	5%	4%
R37C45	3A	3%	3%
R38C62	3A	9%	5%

A total of 25 dents were found at either support locations or free span.

There were no tubes with a distorted support signal indication.

There were 415 Manufacturing Buff Marks recorded with the bobbin probe based on the current outage recording criteria.

There were 32 indications categorized as non-quantifiable. Diagnostics determined that no flaw-like indications were present.

There were two tubes indicating permeability variation.