

OPERATING DATA REPORT

DOCKET NO. 50-344
 DATE 8-1-85
 COMPLETED BY F. J. Illmer
 TELEPHONE (503) 556-3713
 Ext. 495

OPERATING STATUS

1. Unit Name: Trojan Nuclear Plant
2. Reporting Period: July 1985
3. Licensed Thermal Power (MWt): 3411
4. Nameplate Rating (Gross MWe): 1216
5. Design Electrical Rating (Net MWe): 1130
6. Maximum Dependable Capacity (Gross MWe): 1122
7. Maximum Dependable Capacity (Net MWe): 1080

Notes

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:
N/A

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.</u>	<u>5,087.0</u>	<u>78,143.0</u>
12. Number Of Hours Reactor Was Critical	<u>537.2</u>	<u>3,304.6</u>	<u>46,050.3</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>3,887.4</u>
14. Hours Generator On-Line	<u>475.6</u>	<u>3,225.1</u>	<u>45,560.6</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>3,249.</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,474,843.0</u>	<u>10,677,221.0</u>	<u>144,663,383.0</u>
17. Gross Electrical Energy Generated (MWH)	<u>475,460.0</u>	<u>3,417,954.</u>	<u>46,973,734.0</u>
18. Net Electrical Energy Generated (MWH)	<u>444,973.0</u>	<u>3,244,227.</u>	<u>44,394,757.0</u>
19. Unit Service Factor	<u>63.9</u>	<u>63.4</u>	<u>58.3</u>
20. Unit Availability Factor	<u>63.9</u>	<u>63.4</u>	<u>62.5</u>
21. Unit Capacity Factor (Using MDC Net)	<u>55.4</u>	<u>59.1</u>	<u>52.6</u>
22. Unit Capacity Factor (Using DER Net)	<u>52.9</u>	<u>56.4</u>	<u>50.3</u>
23. Unit Forced Outage Rate	<u>19.9</u>	<u>8.4</u>	<u>16.6</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: N/A

	Forecast	Achieved
26. Units In Test Status (Prior to Commercial Operation):		
INITIAL CRITICALITY	<u>N/A</u>	<u>N/A</u>
INITIAL ELECTRICITY	<u>N/A</u>	<u>N/A</u>
COMMERCIAL OPERATION	<u>N/A</u>	<u>N/A</u>

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-344

UNIT: Trojan

DATE: 8-1-85

COMPLETED BY: F. J. Ulmer

TELEPHONE: (503) 556-3713

Ext. 495

MONTH July 1985

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-18	17	1052
2	-14	18	1037
3	-33	19	1032
4	-33	20	296
5	-33	21	-18
6	1	22	-29
7	222	23	-33
8	447	24	-33
9	541	25	652
10	967	26	1047
11	1034	27	1050
12	1044	28	1048
13	1065	29	1059
14	1056	30	1063
15	1032	31	1056
16	981		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-344UNIT NAME TrojanDATE 8-1-85COMPLETED BY F. J. UlmerTELEPHONE (503) 556-3713

Ext. 495

REPORT MONTH July 1985

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
85-03	850502	S	144.9	C	1	NA	NA	NA	1985 Refueling Outage
85-04	850706	S	5.4	B	4	NA	NA	NA	Turbine-Generator Testing Reactor Remained Critical
85-05	850720	F	118.1	A	3	85-09	EB	TransF	High Winding temperatures on Unit Auxiliary Transformer due to failure of transformer cooling system caused an electrical bus/ main generator lockout. The lockout caused a turbine trip/ reactor trip from 100% power. Following the trip the diesel Auxiliary Feedwater pump tripped on low suction pressure after starting automatically. The unit auxiliary transformer was repaired and special plant test were performed on the Auxiliary Feedwater pumps to optimize valve settings and control system settings.

¹
F- Forced
S- Scheduled

²
Reason:
A-Equipment Failure (Explain)
B-Maintenance of Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

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

⁴
Exhibit G - Instructions
for Preparation of Data
Entry Sheets for Licensee
Event Report (LER) File (NUREG-
0161)

⁵
Exhibit I - Same Source

SUMMARY OF OPERATING EXPERIENCE

DOCKET NO: 50-344
DATE: 8-1-85
COMPLETED BY: F. J. Ulmer
TELEPHONE: 503-556-3713

OPERATION:

See Attached

MAJOR SAFETY-RELATED MAINTENANCE:

1. Completed auxiliary feedwater pump auto-start operational reliability testing.
2. Corrected 'A' RTD bypass (Th) line blockage at valve.

MISCELLANEOUS MAINTENANCE:

South main transformer #4 oil circulation pump was repaired.

LICENSE CHANGES:

None

MISCELLANEOUS:

1. Stopped several condenser air leaks
2. Replaced two main condenser tube plugs.

Operation

The plant began the month of July in Mode 4 and ended the month in Mode 1 at 100% power. On July 1 at 0540 the plant secured heatup and cooled down to Mode 5 to investigate and repair a RTD bypass manifold flow blockage on Loop A. Valve 8067A ('A' RTD bypass isolation valve) was removed, replaced, rewelded, and the RTD bypass flow as tested satisfactorily. On July 2, the plant began heatup and entered Mode 4 at 0410 and Mode 3 on July 3 at 0850. Hot rod drop testing was completed satisfactorily on July 3. At 2140 a Reactor Vessel Flange Leakoff high-temperature alarm was received, the inner seal was isolated and the outer seal was valved in. On July 4 at 0612 during recovery from the 10-year reactor coolant system class 1 test, A and D RCS loop first-off and second-off drain valves were determined to be leaking and at 0700 an Unusual Event was declared, based on greater than 10 gpm uncontrolled leakage from the Reactor Coolant Drain Tank (RCDT) to the Containment Recirculation Sump via the RCDT relief valve. The RCS loop drain valves were promptly retorqued closed and the leakage stopped. At 0805, the Unusual Event was terminated. On July 4 at 1630, the plant entered Mode 2 and the reactor was brought critical at 1712 for Low Power Physics Testing. On July 5 at 1242, the reactor was tripped from zero (0%) power as part of physics testing. At 1940 the turbine-generator unit was synchronized onto the grid and at 2350 the unit was disconnected from the grid as part of turbine generator testing. On July 7 at 0513, the turbine generator unit was again resynchronized with the grid. Reactor power was then increased at 3% per hour to 35%, 45%, 50%, and 75% with holds and 10% power reductions for physics testing.

On July 10 as reactor power was increased to 99%, various high steam flow safety injection bistables began to actuate. Reactor power was limited to less than 98%, while investigating the problem. The high steam flow safety injection setpoints were checked and the setpoints were recalibrated. Also, condensate oxygen levels increased following the return to power. Special teams were setup to test all condenser penetrations. Numerous small air leaks were found around the condensers and two major air leaks were found on the 'B' condensate pump suction expansion joint and the southeast bottom corner of the 'A' condenser foundation mount. As part of the process in indentifying oxygen source, power was reduced to 90% on July 11 at 1956. At 2030 condensate oxygen had decreased and power returned to 99%.

Due to warm weather conditions, the main transformer and the auxiliary transformer unit experienced high temperatures. Additional cooling of the transformers was instituted by spraying water on the tranformer cooling units. Spraying the coolers with water began on July 10 and continued through the month whenever transformer temperatures approached undesirable levels.

On July 16 at 2200, reactor power was reduced to 23% to allow a containment entry into the reactor bioshield area to investigate and correct a high/low oil level alarm on 'C' reactor coolant pump. RCP bearing oil level was found high and it was lowered to the correct level. The reactor was returned to full power on July 17 at 0325.

On July 20 at 0706, the reactor tripped from 100% power. The trip was caused by a short circuit in the auxiliary transformer unit cooling system which tripped all of the oil circulation pumps and cooling fans. The auxiliary transformer then tripped on high winding temperature causing an electrical bus generator lockout. The generator lockout tripped the main turbine and caused a reactor trip. After the reactor trip, the diesel auxiliary feedwater pump started automatically and then tripped due to low suction pressure. The diesel AFP suction trip was blocked by the control room operator and the pump restarted however, its start caused the turbine AFP which had been operating to trip on low suction pressure. The auxiliary transformer problem was corrected and the reactor was brought critical on July 20 at 1447. At 1734 the reactor was manually shutdown due to high sodium and calcium in the condensate system. Further investigation revealed a condenser tube leak. A tube plug on the 'B' train outlet of 'C' condenser shell had become dislodged during the turbine trip and subsequent condenser pressure transient. On July 21 at 1830, the plant began a cooldown to Mode 4 to facilitate main condenser repairs and allow secondary water chemistry cleanup. In order to maintain uninterrupted auxiliary feedwater pump operation during auto starting, tests were conducted on both pumps to determine discharge valve positioning, required net positive suction head, and optimum time delay for suction pressure trips.

On July 21 at 1035, the plant entered Mode 3 and criticality was attained at 2233 on July 24. The turbine generator was synchronized at 0502 on July 25. The plant returned to full power and remained there through the end of July.

Docket No. 50-344
Date: 8-1-85
Completed by: G. G. Bair
Telephone: (503) 556-3713
X-234

REFUELING INFORMATION REQUEST

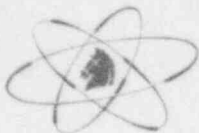
1. Name of facility: Trojan Nuclear Plant
2. Scheduled date for next refueling shutdown: April 1986
3. Scheduled date for restart following refueling: June 1986
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? Probably Not

If answer is yes, what, in general, will these be?

If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Reference 10 CFR Section 50.59)?

If no such review has taken place, when is it scheduled?

5. Scheduled date(s) for submitted proposed licensing action and supporting information: n/a
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:
none
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool:
a) 193 b) 340
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:
1408 No Expansion Planned
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:



Portland General Electric Company
Trojan Nuclear Plant
P.O. Box 439
Rainier, Oregon 97048
(503) 556-3713

August 7, 1985
WSO-510-85

Office of Resource Management
US Nuclear Regulatory Commission
Washington, DC 20555

Gentlemen:

In accordance with the Trojan Nuclear Plant Technical
Specifications reporting requirements, the monthly report
is submitted for July, 1985.

Sincerely,

W. S. Orser
General Manager

WSO/²⁰⁸GGB/FJU:pat

Attachment

c: Distribution
File 93.2b

IE24
11