

SEPTEMBER 1982

SUMMARY OF PLANT OPERATIONS

9/1 Operating at 97% power
9/2 2024 Began decreasing power due to low Auto Stop oil pressure
2052 Tripped turbine
9/3 0006 Reactor at 7.6% power
0820 63% power - holding
1000 88% power - on line
1555 Reactor at 89% power and increasing
9/4 Reactor at 94% power
9/5 1911 Reactor at 85% power - holding
0900 Increasing power
0942 Reactor at 83% power - holding
1500 Reactor at 95% power
9/6 through 9/9 Continued operation at approximately 95% power
9/10 0800 Reduced power to 87.5% due to vibration of rotor bearings
9/11 through 9/15 Continued operation at approximately 88% power due to turbine vibration
9/16 1951 Reactor tripped (feed pump mini-flow line rupture)
9/17 0400 Reactor critical
0820 Rolling main turbine
1517 Plant on line
9/18 through 9/27 Continued operation at approximately 95% power.
Turbine balancing performed during this period was successful.
9/28 1657 Plant experienced low Auto Stop oil pressure
1743 Unit taken off line
9/29 0110 Reactor critical
0153 Unit on line
0650 87% power - holding
1208 Plant at 95% power
9/30 Plant operating at 94% power

With the exceptions noted above, the plant ran at approximately 94% power because the HP Feedwater Heaters 1B/2B were out of service.

Investigated abnormal air leakage into the main condenser.

PERSONNEL CHANGES REQUIRING REPORT

No personnel changes that require reporting in accordance with Technical Specifications Figure 6.2-2 were made in September, 1982.

SUMMARY OF CHANGES IN ACCORDANCE WITH 10 CFR 50.59 (b)

Six changes were completed in September. They were:

1) The logrammeter for R15017 is being moved from cabinet H4MRL, in the control room, to H2WW. All readout and alarm functions for this unit will remain the same. A new control function, in addition to the existing, will be added. If high radiation is detected and the retention basins are being pumped, by the new pump system, the pump will be stopped and its discharge valve closed.

The logrammeter is being moved to eliminate the long signal cable which runs from the detector (R15017 site discharge effluent) to the control room. The long cable run is picking up line noise which is causing the system to indicate higher radiation readings than actually present in the site

SUMMARY OF CHANGES IN ACCORDANCE WITH 10 CFR 50.59 (b) (continued)

discharge effluent.

A second and longer range reason for the move is to modify the system to meet sensitivity requirements of NRC for radiation monitoring of site water discharge.

- 2) Makeup nozzle-thermal sleeve was missing. The missing sleeve cannot cause damage to the reactor vessel, internals, or fuel. Flow blockage cannot occur causing significant reduction to thermal margins. Steam Generator lower head has been inspected and no damage found.
- 3) Added six new penetrations to each Steam Generator because this modification will provide access to the internal header for inspection and stabilization and provide for the addition of an external header.
- 4) Stabilized existing Internal Auxiliary Feedwater Headers by welding. Secured or removed any support brackets or pins which were not secured by sound welds, because the existing Internal Auxiliary Feedwater Headers have become distorted since original manufacture. They will be replaced in function by External Auxiliary Feedwater Headers. They must also be stabilized in place to serve as an extension of the Upper Cylindrical Baffle (steam shroud).

The stabilization method shall be analyzed to assure that the Header will not rupture a steam generator tube due to forces generated by normal operation, a main steam line break, a main feedwater line break, a design basis earthquake, or a loss of coolant accident. The stabilization method is much stronger than the original design used to secure the Internal Header. The conditions which brought about the deformation of the Internal Header, i.e., Auxiliary Feedwater Initiation, will no longer be a factor affecting the stabilized header.

- 5) Existing Internal Auxiliary Feedwater Headers replaced in function by the addition of new External Auxiliary Feedwater Headers with new Steam Generator penetrations because the existing Internal Auxiliary Feedwater Headers have become distorted at some time following original manufacture. This replacement design is based on an existing design which has shown good service for more than 22 Reactor years of operation at five plants. The differences between the existing design and this design are acceptable. This replacement design will fulfill all functions which were originally fulfilled by the Internal Auxiliary Feedwater Header.
- 6) The Auxiliary Feedwater supply lines rerouted to provide Auxiliary Feedwater to new external Auxiliary Feedwater Headers because the original Internal Auxiliary Feedwater Headers are being replaced in function by External Auxiliary Feedwater Headers.

MAJOR ITEMS OF SAFETY RELATED MAINTENANCE

Removed DC Air Start Motors from A Emergency Diesel Generator and replaced them with motors from stock.

REFUELING INFORMATION REQUEST

1. Name of Facility: Rancho Seco Unit 1
2. Scheduled date for next refueling shutdown: January 1983
3. Scheduled date for restart following refueling: July 1983
4. Technical Specification change or other license amendment required:
 - a) Change to Rod Index vs. Power Level Curve (TS 3.5.2)
 - b) Change to Core Imbalance vs. Power Level Curve (TS 3.5.2)
 - c) Tilt Limits (TS 3.5.2)
5. Scheduled date(s) for submitting proposed licensing action: November 1982
6. Important licensing considerations associated with refueling: None
7. Number of fuel assemblies:
 - a) In the core: 177
 - b) In the Spent Fuel Pool: 196
8. Present licensed spent fuel capacity: 579
9. Projected date of the last refueling that can be discharged to the Spent Fuel Pool: 1987

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-312
 UNIT Rancho Seco 1
 DATE October 8, 1982
 COMPLETED BY R. Colombo
 TELEPHONE (916) 452-3211

MONTH September 1982

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>846</u>	17	<u>154</u>
2	<u>693</u>	18	<u>798</u>
3	<u>538</u>	19	<u>829</u>
4	<u>809</u>	20	<u>804</u>
5	<u>797</u>	21	<u>826</u>
6	<u>756</u>	22	<u>822</u>
7	<u>796</u>	23	<u>814</u>
8	<u>794</u>	24	<u>793</u>
9	<u>843</u>	25	<u>791</u>
10	<u>769</u>	26	<u>810</u>
11	<u>762</u>	27	<u>814</u>
12	<u>761</u>	28	<u>580</u>
13	<u>762</u>	29	<u>639</u>
14	<u>717</u>	30	<u>804</u>
15	<u>730</u>	31	<u>N/A</u>
16	<u>619</u>		

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.

OPERATING DATA REPORT

DOCKET NO. 50-312
 DATE October 8, 1982
 COMPLETED BY R. Colombo
 TELEPHONE (916) 452-3211

OPERATING STATUS

1. Unit Name: Rancho Seco Unit 1
2. Reporting Period: September 1982
3. Licensed Thermal Power (MWt): 2772
4. Nameplate Rating (Gross MWe): 963
5. Design Electrical Rating (Net MWe): 918
6. Maximum Dependable Capacity (Gross MWe): 917
7. Maximum Dependable Capacity (Net MWe): 873

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>720</u>	<u>6,551</u>	<u>65,352</u>
12. Number Of Hours Reactor Was Critical	<u>711.2</u>	<u>3,214.8</u>	<u>38,451.4</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>2,855.2</u>	<u>9,313.8</u>
14. Hours Generator On-Line	<u>696.3</u>	<u>3,091.9</u>	<u>36,862.3</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>1,210.2</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,729,668</u>	<u>2,255,498</u>	<u>92,883,081</u>
17. Gross Electrical Energy Generated (MWH)	<u>566,832</u>	<u>2,321,698</u>	<u>31,083,127</u>
18. Net Electrical Energy Generated (MWH)	<u>531,490</u>	<u>2,170,995</u>	<u>29,328,112</u>
19. Unit Service Factor	<u>96.7</u>	<u>47.2</u>	<u>56.4</u>
20. Unit Availability Factor	<u>96.7</u>	<u>47.2</u>	<u>58.3</u>
21. Unit Capacity Factor (Using MDC Net)	<u>84.6</u>	<u>37.9</u>	<u>51.4</u>
22. Unit Capacity Factor (Using DER Net)	<u>80.4</u>	<u>36.1</u>	<u>48.9</u>
23. Unit Forced Outage Rate	<u>3.3</u>	<u>2.3</u>	<u>29.6</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

Refueling and TMI Modifications, January 1982 - 6 months.

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

26. Units In Test Status (Prior to Commercial Operation):

	Forecast	Achieved
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>

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH September 1982

DOCKET NO. 50-312
 UNIT NAME Rancho Seco 1
 DATE 82-09-30
 COMPLETED BY P. Colombo
 TELEPHONE (916)452-3211

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
12	9-2-82	F	3.0	A	1	N/A	HA	VALVEX	Auto-Stop Oil Pressure; checking for leak
13	9-16-82	F	12.6	A	3	N/A	CH	PIPEXX	Feed Pump Mini-Flow line rupture; line replaced.
14	9-28-82	F	8.1	A	1	N/A	HA	VALVEX	Auto-Stop Oil Pressure; replaced back-pressure regulator.

¹
 F: Forced
 S: Scheduled

²
 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)

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