



REGULATORY BUCKET FILE COPY

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In compliance with section 6.9, Reporting Requirements for the Salem Technical Specifications, 10 copies of the following monthly operating reports for the month of March, 1978 are being sent to you.

Average Daily Unit Power Level
Operating Data Report
Unit Shutdowns and Power Reductions
Major Plant Modification
Summary of Safety Related Maintenance
Operating Summary
Refueling Information

H. J. Heller

H. J. Heller
Manager - Salem Generating Station

cc: Mr. Boyce H. Grier
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Region I
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Director, Office of Management
Information and Program Control
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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Aug 3
11/10

OPERATING DATA REPORT

DOCKET NO.: 50-272

DATE : April 10, 1978

COMPLETED BY: J.M. Zupko, Jr.

TELEPHONE: 609-365-7000 X507

OPERATING STATUS

1. Unit Name: Salem No. 1
2. Reporting Period: March, 1978
3. Licensed Thermal Power (MWt): 3338
4. Nameplate Rating (Gross MWe): 1135
5. Design Electrical Rating (Net MWe): 1090
6. Maximum Dependable Capacity (Gross MWe): 1124
7. Maximum Dependable Capacity (Net MWe): 1079
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reason:
None

Notes:

9. Power Level To Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: _____

| | This Month | Year to Date | Cumulative |
|---|------------|--------------|------------|
| 11. Hours In Reporting Period | 744 | 2160 | 6601 |
| 12. Number Of Hours Reactor Was Critical | 354.2 | 1522.7 | 4065.9 |
| 13. Reactor Reserve Shutdown Hours | 0 | 0 | 0 |
| 14. Hours Generator On-Line | 352.6 | 1460.1 | 3890.7 |
| 15. Unit Reserve Shutdown Hours | 0 | 0 | 0 |
| 16. Gross Thermal Energy Generated(MWH) | 1,080,163 | 4,505,479 | 11,200,699 |
| 17. Gross Electrical Energy Generated(MWH) | 374,090 | 1,548,500 | 3,734,810 |
| 18. Net Electrical Energy Generated(MWH) | 354,613 | 1,475,405 | 3,715,333 |
| 19. Unit Service Factor | 47.4 | 67.6 | 58.9 |
| 20. Unit Availability Factor | 47.4 | 67.6 | 58.9 |
| 21. Unit Capacity Factor (Using MDC Net) | 44.2 | 63.3 | 52.1 |
| 22. Unit Capacity Factor (Using DER Net) | 43.7 | 62.7 | 51.6 |
| 23. Unit Forced Outage Rate | 52.6 | 32.4 | 21.3 |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>None</u> | | | |

25. If Shut Down At End of Report Period, Estimated Date of Startup: 5/21/78

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

| | Forecast | Achieved |
|----------------------|----------|----------|
| INITIAL CRITICALITY | 9/30/76 | 12/11/76 |
| INITIAL ELECTRICITY | 11/1/76 | 12/25/76 |
| COMMERCIAL OPERATION | 12/20/76 | 6/30/77 |

8-1-7.R2

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-272

UNIT Salem No. 1

DATE April 10, 1978

COMPLETED BY J.M. Zupko, Jr.

TELEPHONE 609-365-7000 X507

MONTH March, 1978

DAY AVERAGE DAILY POWER LEVEL

(MWe-NET)

| | |
|----|------|
| 1 | 1116 |
| 2 | 1115 |
| 3 | 1057 |
| 4 | 758 |
| 5 | 1042 |
| 6 | 409 |
| 7 | 835 |
| 8 | 1090 |
| 9 | 1054 |
| 10 | 1117 |
| 11 | 1115 |
| 12 | 1103 |
| 13 | 1023 |
| 14 | 1059 |
| 15 | 1010 |
| 16 | 9 |

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 | 0 |
| 30 | 0 |
| 31 | 0 |

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH March, 1978DOCKET NO.: 50-272UNIT NAME: Salem No. 1DATE: April 10, 1978COMPLETED BY: J.M. Zupko, Jr.TELEPHONE: 609-365-7000 X507

| NO. | DATE | TYPE ¹ | DURATION (HOURS) | REASON ² | METHOD OF SHUTTING DOWN REACTOR | LICENSE EVENT REPORT # | SYSTEM CODE ⁴ | COMPONENT CODE ⁵ | CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE |
|-------|---------|-------------------|---------------------|---------------------|---|------------------------------|-----------------------------|--------------------------------|---|
| 78-32 | 3-3-78 | F | 0 | A | 4 (A) | -- | HH | Filter | Clean Cond. and Stm.Gen. Feed Pump Suction Strainers. |
| 78-33 | 3-5-78 | F | 0 | A | 4 (A) | -- | HA | Instru | Frozen feeler line on turbine impulse pressure channel. |
| 78-34 | 3-6-78 | F | 10.9 | G | 3 | -- | HA | ZZZZZZ | Turbine - Reactor Trip caused by per- sonnel error during routine trouble- shooting of turbine alarm and trip circuitry. |
| 78-35 | 3-8-78 | F | 0 | A | 4 (A) | -- | HH | Filter | Clean 11, 12, 13 Cond.Pump Suction Strainers. |
| 78-36 | 3-12-78 | F | 0 | B | 4 (A) | -- | HA | ZZZZZZ | Turbine valve test. |
| 78-37 | 3-13-78 | F | 0 | A | 4 (A) | -- | HH | Filter | Clean 11 Cond Pump Suction Strainer. |
| 78-38 | 3-13-78 | F | 0 | A | 4 (A) | -- | HH | Filter | Clean 11 Cond Pump Suction Strainer. |

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

NOTES: A. Load Reduction
B. Continuation of previous outage.

8-1-7.R2

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH March, 1978

DOCKET NO.: 50-272
UNIT NAME: Salem No. 1
DATE: April 10, 1978
COMPLETED BY: J.M. Zupko, Jr.
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| NO. | DATE | TYPE ¹ | DURATION (HOURS) | REASON ² | METHOD OF SHUTTING DOWN REACTOR | LICENSE EVENT REPORT # | SYSTEM CODE ⁴ | COMPONENT CODE ⁵ | CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE |
|-------|---------|-------------------|---------------------|---------------------|---|------------------------------|-----------------------------|--------------------------------|---|
| 78-39 | 3-14-78 | F | 0 | A | 4(A) | -- | HA | Turbin | High vibration, Main Turbine Bearing No. 3. |
| 78-40 | 3-15-78 | F | 380.5 | A | 1 | -- | HA | Turbin | High vibration, Main Turbine Bearing No. 3. Unit shut-down to make necessary turbine repairs. |

MAJOR PLANT MODIFICATIONS

REPORT MONTH March, 1978DOCKET NO.: 50-272UNIT NAME: Salem #1DATE: April 10, 1978COMPLETED BY: J.M. Zupko, Jr.TELEPHONE: 609-365-7000 X507

| *DCR NO. | PRINCIPLE SYSTEM | SUBJECT |
|----------|-------------------|---|
| ED-0051 | Computer Inverter | Replace Power Supply |
| ED-0077 | Heating Steam | Add Atmospheric Vent to Condensate Receiver. |
| ED-0124 | Safety Injection | Stiffen Baseplate on No. 12 S.I. Pump Motor |
| ED-0129 | Part Length Rods | Remove Annunciator D241 |
| ED-0138 | Plumbing | Add Float Switch Alarm in Relay Room Pipe Enclosure. |
| OD-0010 | Auxiliary Alarm | Change State of Sampling System Valve Alarm. |

MAJOR PLANT MODIFICATIONS
REPORT MONTH March, 1978

DOCKET NO.: 50-272
UNIT NAME: Salem #1
DATE: April 10, 1978
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| *DCR NO. | 10CFR50.59. SAFETY EVALUATION |
|----------|---|
| | Unless indicated otherwise, no change to the FSAR or Technical Specifications are involved nor does the Design Change involve an Unreviewed Safety Question. |
| ED-0051 | Safety related equipment will not be affected. |
| ED-0077 | This design change does not effect any presently performed safety analyses nor does it create any new hazards. The Bases of the Tech. Specs. are not affected. |
| ED-0124 | Change will reduce vibrations but will not effect other performance characteristics. Performance of motors' safety function will not be affected by this change. Therefore, the criteria of an unreviewed safety question is not satisfied. |
| ED-0129 | Safety related equipment will not be affected. |
| ED-0138 | This design change does not in any way alter the function of the pipe enclosure. An unreviewed safety question is not involved. |
| OD-0010 | Safety related equipment will not be affected. |

DOCKET NO.: 50-272

UNIT ME: Salem #1

DATE: April 10, 1978

COMPLETED BY: J. M. Zupko, Jr.

TELEPHONE: 609-365-7000 X507

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Performance

REPORT MONTH March, 1978

| WORK ORDER NO. | EQUIPMENT | FAILURE DESCRIPTION | CORRECTIVE ACTION |
|----------------|--------------------------------|--|-------------------------------------|
| PD-3807 | S.S.P.S. Relays | Verify correct relays installed. | Verified as instructed. |
| PD-4540 | #13 Chiller Temp. Controller | Check temperature control. | Verified Controller set-point. |
| PD-4545 | Valves 12SW92 & 12SW93. | Restroke valves. | Restroked valves. |
| OD-8309 | #13 Aux. F.W. Pump. | Disch. press. indication not working. | Replaced transmitter power switch. |
| OD-8231 | N.I.S. N-47 | Redundant recorder channels do not agree. | Recalibrated recorder. |
| OD-8129 | 1st Stage Pressure Indication. | Redundant channels do not agree. | Recalibrated indication. |
| OD-8408 | 11 Batch Tank | Level indication fluctuates. | Increased air flow to bubbler. |
| PD-4558 | 1FT523 | Transmitter found out of spec. | Recalibrated 1FT-523. |
| PD-4569 | Module 1FC521A & B. | 1FC521A&B found out of spec on functional test. | Replaced capacitors & recalibrated. |
| PD-4579 | Valve 12SW58 | Open indication not working. | Adjusted limit switch. |
| PD-4581 | Module 1PC456B & D. | 1PC456B & D found out of spec. on functional test. | Adjusted set points. |
| PD-4590 | N.I.S. N-43 | Functional test out of spec. | Recalibrated. |

UNIT NAME: Salem #1.

DEPARTMENT Performance

DATE: April 10, 1978

REPORT MONTH March, 1978

COMPLETED BY: J.M. Zupko, Jr.

TELEPHONE: 609-365-7000 X507

| WORK ORDER NO. | EQUIPMENT | FAILURE DESCRIPTION | CORRECTIVE ACTION |
|----------------|------------------------------|--|-----------------------------------|
| OD-8479 | 28 Volt DC Bus | Ground on 28 VDC Bus. | Repaired grounded relay. |
| PD-4614 | 1FC-415 | 1FC415 out of spec. | Recalibrated 1FC-415. |
| PD-4612 | Module 1FC-435 | Comparator out of spec on functional test. | Recalibrated. |
| PD-4559 | 11 Stm. Gen. Feed Pump. | Operation of speed control incorrect. | Replaced operating station |
| PD-4316 | 13 Fan Coil Unit. | Check out alarm. | Verified alarm. |
| OD-8497 | Containment Channel I Press. | Redundant channels do not agree. | Recalibarated Transmitter PT948D. |
| | | | |

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT MaintenanceREPORT MONTH March, 1978DOCKET NO.: 50-272UNIT NAME: Salem #1DATE: April 10, 1978COMPLETED BY: J. M. Zupko, Jr.TELEPHONE: 609-365-7000 X507

| WORK ORDER NO. | EQUIPMENT | FAILURE DESCRIPTION | CORRECTIVE ACTION |
|----------------|--------------------------------|---|-------------------------------------|
| OD-8462 | 15 Service Water Pump | 4KV breaker spring won't charge. | Repositioned striker plate |
| OD-8443 | 11 Chiller | Head gasket leaking. | Replaced head gasket. |
| MD-2559 | Valve 1CV18 | Packing leak. | Tightened packing gland. |
| OD-8375 | 4KV Relay Enclosure | Plastic relay case broken. | Replaced relay. |
| OD-8438 | Elev. 130 Containment Air Lock | Inside door has cracked roller. | Replaced roller bearing. |
| OD-8268 | Steam Generator Snubber. | Tank sight glass leaking. | Tightened all sight glass. |
| OD-8439 | 1A28V DC Bus | Ground on 1A 28VDC Bus. | Repaired pin on lamp circuit. |
| OD-6054 | #12 Waste Gas Comp. | Motor appears burnt out. | Installed new motor. |
| MD-2517 | Valve 12 & 14 MS168 | Packing leak. | Repacked valves. |
| MD-2526 | Valve 12MS199 | Packing leak. | Repacked valve. |
| OD-8307 | Valve 11MS18 | Grease plug leaking. | Welded grease plug in body |
| MD-2571 | Valve 1SJ12 & 1SJ13. | Packing leaks. | Repacked valves. |
| OD-8793 | Boric Acid | Evap. condenser leaking. | Plugged vent cond. tube. |
| OD-8601 | 1A Diesel | No alarm indication on local annunciator panel. | Replaced fuse in Annunciator Panel. |
| OD-8589 | 15 Water Pump | Packing leak. | Repacked pump. |

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: April 10, 1978

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SUMMARY OF SAFETY RELATED MAINTENANCE

DÉPARTEMENT Maintenance

REPORT MONTH March, 1978

| WORK ORDER NO. | EQUIPMENT | FAILURE DESCRIPTION | CORRECTIVE ACTION |
|----------------|---------------------------------|------------------------------|----------------------------|
| OD-8595 | 15 Service Water Pump Strainer. | Strainer shaft packing leak. | Repacked strainer. |
| MD-2527 | 11 Component Cooling Hx. | Repair tube leaks. | Plugged leaking Hx. Tubes. |
| OD-8777 | Valves 13RC16, 17, 18. | Packing leaks. | Repacked valves. |
| | | | |

MONTHLY OPERATING SUMMARY

SALEM I

MARCH, 1978

- 3-1 The unit operated at full load until 3-3.
- 3-3 At 1744 a load reduction of 5% per hour was initiated to reduce load to 50% to clean feed and condensate pump suction strainers.
- 3-4 At 1140 a load increase of 5% per hour was initiated. The unit reached 100% load at 2200.
- 3-5 At 0211 the unit experienced a load rejection from 100% to 68% when a sensing line for turbine first stage pressure froze. The unit was returned to full power at 1130.
- 3-6 At 0836 a reactor/turbine trip occurred from 100% power, when an electrician trouble shooting a turbine thrust bearing alarm shorted out two contacts in the auto-stop oil circuit. The reactor was taken critical at 1800 and the unit synchronized at 1923.
- 3-7 The unit reached 100% load at 1800.
- 3-8 At 1929 a load reduction of 5% per hour was initiated to reduce load to 70% to clean condensate pump suction strainers.
- 3-9 At 0115 a load increase of 5% per hour was initiated. The unit reached 100% load at 0722. The unit stayed at full power until 3-12.
- 3-12 At 0001 the unit started a load reduction to 89% to perform a periodic turbine valve test. The unit returned to full power at 0630.
- 3-13 At 1558 a load reduction was initiated to reduce load to 70% to clean condensate pump suction strainers. At 2305 began to return

to full load. The unit reached 100% load at 0500 on 3-14.

3-14 At 1858 a load reduction was started to reduce load to 82% due to high vibration in No. 3 Main Turbine Bearing.

3-15 The unit reached 100% load at 0430. At 1830 a load reduction at 10% per hour was initiated to take the unit off the line due to high turbine bearing vibration.

3-16 The unit was taken off the line at 0327. An outage was started to make turbine repairs.

REFUELING INFORMATION

DOCKET NO.: 50-272

UNIT: Salem No. 1

DATE: April 10, 1978

COMPLETED BY: J. M. Zupko, Jr.

TELEPHONE: 609-365-7000 X507

MONTH: March, 1978

1. Refueling information has changed from last month:

YES _____ NO X

2. Scheduled date of next refueling: February 6, 1979

3. Scheduled date for restart following refueling: April 3, 1979

4. A. Will Technical Specification changes or other license amendments be required? YES _____ NO _____

NOT DETERMINED TO-DATE March, 1978

B. Has the reload fuel design been reviewed by the Station Operating Review Committee? YES _____ NO X

If no, when is it scheduled? November, 1978

5. Scheduled date(s) for submitting proposed licensing action:

December, 1978 if required.

6. Important licensing considerations associated with refueling:

None

7. Number of Fuel Assemblies:

A. In-Core 193

B. In Spent Fuel Storage 0

8. Present licensed spent fuel storage capacity: 264

Future spent fuel storage capacity: 1170

9. Date of last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: April, 1982