AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-311
Unit Name Salem # 2
Date April 10,1986
Telephone 609-935-6000
Extension 4455

Completed by Pell White

Month March 1986

Day	Average Daily Power Level (MWe-NET)	Day	Average Daily Power Level (MWe-NET)
1	1082	17	1056
2	1085	18	1077
3	1103	19	1087
4	1094	20	1094
5	1092	21	1077
6	1089	22	919
7	1089	23	707
8	1053	24	1057
9	1086	25	1084
10	1083	26	1089
11	1091	27	1087
12	1075	28	1088
13	1002	29	1064
14	1030	30	1076
15	981	31	1092
16	1085		

IE24
1/1

OPERATING DATA REPORT

CORRECTED COPY

Docket No. 50-311
Date April 10,1986
Telephone 935-6000
Extension 4455

Completed by Pell White

Operating Status

1.	Unit Name	Salem No. 2	Notes
2.	Reporting Period	March 1986	
3.	Licensed Thermal Power (MWt)	3411	
4.	Nameplate Rating (Gross MWe)	1170	
5.	Design Electrical Rating (Net MWe)	1115	
6.	Maximum Dependable Capacity (Gross MWe)	1149	
7.	Maximum Dependable Capacity (Net MWe)	1106	

8. If Changes Occur in Capacity Ratings (items 3 through 7) since Last Report, Give Reason N/A

9. Power Level to Which Restricted, if any (Net MWe) N/A

10. Reasons for Restrictions, if any N/A

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	744	2160	39145
12. No. of Hrs. Reactor was Critical	744	1715.4	22041.2
13. Reactor Reserve Shutdown Hrs.	0.0	0.0	3533.6
14. Hours Generator On-Line	744	1697.4	21234.2
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2477746	5652061	65397759
17. Gross Elec. Energy Generated (MWH)	819170	1873820	21450300
18. Net Elec. Energy Generated (MWH)	786620	1792687	20327531
19. Unit Service Factor	100	78.6	54.2
20. Unit Availability Factor	100	78.6	54.2
21. Unit Capacity Factor (using MDC Net)	95.6	75.0	47.0
22. Unit Capacity Factor (using DER Net)	94.8	74.4	46.6
23. Unit Forced Outage Rate	0	17.5	36.0

24. Shutdowns scheduled over next 6 months (type, date and duration of each)
N/A

25. If shutdown at end of Report Period, Estimated Date of Startup:
N/A

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

	Forecast	Achieved
Initial Criticality	6/30/80	8/2/80
Initial Electricity	9/1/80	6/3/81
Commercial Operation	9/24/80	10/13/81

8-1-7.R2

UNIT SHUTDOWN AND POWER REDUCTIONS
REPORT MONTH MARCH 1986

Completed by J.P. Ronafalvy

Docket No. 50-311
Unit Name Salem No.2
Date April 10,1986
Telephone 609-935-6000
Extension 4455

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
86-134	0315	S	0.4	B	5	-	HC	PUMPXX	Condensate/ Hotwell Pumps
86-142	0316	F	0.9	A	5	-	HF	PUMPXX	Circulating Water Pumps
86-160	0322	F	2.8	A	5	-	HH	PUMPXX	Feedwater Pump
86-162	0322	F	15.4	A	5	-	HH	PUMPXX	Feedwater Pump

1
F: Forced
S: Scheduled

2 Reason
A-Equipment Failure-explain
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & Licensing Exam
F-Administrative
G-Operational Error-explain
H-Other-explain

3 Method
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Continuation of Previous Outage
5-Load Reduction
9-Other

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

5 Exhibit 1 Salem as Source

MAJOR PLANT MODIFICATIONS
REPORT MONTH MARCH 1986

DOCKET NO.: 50-311
UNIT NAME: Salem 2
DATE: April 10, 1986
COMPLETED BY: J. Ronafalvy
TELEPHONE: 609/339-4455

*DCR NO.	PRINCIPAL SYSTEM	SUBJECT
2EC-1058	Hydrogen Recombiners	The replacement of the existing containment hydrogen monitoring system with one that is qualified for use in the containment does no alter the function of the system. It assures the operator of continuous indication of hydrogen concentration in containment as required by NUREG 0737.
2EC-1534	Bldg. & Equip. Drain; Flood & Sump Pumps	Change nuclear classification of containment sump pumps from Nuclear Class III to Non-Nuclear Safety.
2EC-1682	Polar Containment Gantry Crane	Revise upper limit switch protection arrangement as necessary to follow the recommendations made by Westinghouse's Nuclear Division & contained in Technical Bulletin No. NSD-TB 75-9, dated 9/15/75.
2EC-1687	Service Water	For 21,22,23,24,25 SW57 and SW223 vlaves, remove cavitation control tube bundles from all ten valves.

* Design Change Request

UNIT 2 PLANT MODIFICATIONS (continued)
REPORT MONTH MARCH 1986

*DCR NO.	PRINCIPAL SYSTEM	SUBJECT
2EC-1724	Chem. & Volume Control	Replace the 2CV45 & 2CV50 Valves. Replace the piping downstream of the CV45 & CV50 valves, located on the No. 21 & No. 22 C/SI pump casing drain line, with piping in accordance with pipe spec. 49G and install a 1500# blind flange at the end of these lines in accordance with pipe spec. 53D to be used during maint. on the respective pumps.
2EC-1772	RHR Sump Pump Level Indication	Install a new upper 3' of probe for the containment sump indication. The new probe should contain the same resistance per foot as the first 14' of probe.
2SC-0483	Chilled Water System	Change shaft sleeve material from stainless steel (316) to monel.
2SC-0949	Waste Gas	Add two test connections to the Waste Gas System. One between 2WG6 & 2WL99 on vent header & the other 21 & 22 WG27 and 21,22,23, & 24 WG33 Valves on the H.P. header. Both test connections should be located inside, or as closed as possible to the WG valve rooms as possible.
2SC-1488	Service Water	Provide permanent engineering design to satisfy operations department test SP(O) 4.0.5V leak rate check for 21 & 22 SW51 and 21, & 22 SW79 Valves.

* Design Change Request

MAJOR PLANT MODIFICATIONS
REPORT MONTH - MARCH 1986

DOCKET NO: 50-311
UNIT NAME: SALEM 2
DATE: APRIL 10, 1986
COMPLETED BY: J. RONAFALVY
TELEPHONE: (609)339-4455

*DCR	SAFETY EVALUATION 10 CFR 50.59
2EC-1058	The replacement of the existing Containment Hydrogen Monitoring System with one that is qualified for use in the containment does not alter the fucntion of the system. This change assures the operator of a continuous indication of hydrogen concentration in the containment as requird by NUREG 0737. No unreviewed safety or environmental questions are involved.
2EC-1534	The Containment Sump Pumps themselves are not part of a safety related system, and do not affect the safe shutdown of the plant, accident mitigation or radioactivity release. The design change has no affect on plant discharge, therefore, no change is made in the environmental impact. No unreviewed safety or environmental questions are involved.
2EC-1682	The crane performs no safety function in regard to the safe shutdown of the plant. This modification will not change any plant process or discharge and will not affect the existing environmental impact. No unreviewed safety or environmental questions are involved.
2EC-1687	The removal of the Cavitrol tube bundles will enable the valves to function without interference from loosened tube bundles or reduced service water flow due to plugging of the tube bundles with the shells of miscellaneous mollusks and marine organisms. No plant process or discharge is affected by this design change. No unreviewed safety or environmental questions are involved.

* Design Change Request

UNIT 2 MAJOR PLANT MODIFICATIONS (contd)
REPORT MONTH - MARCH 1986

*DCR	SAFETY EVALUATION 10 CFR 50.59
2EC-1724	The valves have been replaced due to the maintenance problem imposed by the welded bonnet design of the original valves. The new valves are designed to system temperature and pressure and are classified as Seismic I and Nuclear I. Installation of the blind flange eliminated two potential sources of unidentified leakage from the Reactor Coolant System. No unreviewed safety or environmental questions are involved.
2EC-1772	Installation of the design change enhanced the operators ability to determine actual sump level. This modification does not alter any plant process or discharge. Therefore, no unreviewed safety or environmetnal questions are involved.
2SC-0483	Corrosion, pitting and wearing of the stainless steel shaft sleeve required a replacement sleeve of a better quality and grade material. The new pump shaft sleeve is designed to the same specifications as the originals. Changing the shaft sleeve material from stainless steel to monel does not affect any presently performed safety analysis nor does it create any new safety hazards. No plant process or discharge is affected by this design change. No unreviewed safety or environmental questions are involved.
2SC-0949	The new connections are only to be used for testing and will be blind flanged during system operation. No plant process or discharge is affected by this design change. No unreviewed safety or environmental questions are involved.

UNIT 2 MAJOR PLANT MODIFICATIONS (contd)
REPORT MONTH - MARCH 1986

*DCR	SAFETY EVALUATION 10 CFR 50.59
2SC-1488	This DCR provides a more dependable means of leak rate testing of service water check valves 21 & 22 SW51 and 21 & 22 SW79. This new design will ensure the integrity of the valves and that they function as designed. A vent valve allows pressure to be relieved before the blind flange is removed for inspection. This ensures the safety of the inspector. No plant process or discharge is affected by this design change. No unreviewed safety or environmental questions are involved.

* Design Change Request

PSE&G SALEM GENERATING STATION
SAFETY RELATED WORK ORDER LOG

SALEM UNIT 2

WO NO	UNIT	EQUIPMENT IDENTIFICATION	
8508060581	2	26SW19	
		FAILURE DESCRIPTION:	VALVE STEM IS SEPERATED FROM VALVE SEAT.
		CORRECTIVE ACTION:	REPAIRED & REPLACED BACK INTO SYS.
86022890025	2	2MS132	
		FAILURE DESCRIPTION:	PLEASE CHECK STROKE ON 2MS132 BECAUSE WE WERE UNABLE TO RELATCH TRIP VALVE WITH OUT ROLLING THE TURBINE. AFTER MANY ATTEMPTS TURBINE WAS FINALLY LATCHED.
		CORRECTIVE ACTION:	FOUND 2MS132 NOT TO BE LEAKING BY. RPM IND 0 @ 23 AUX FD PMP PNL. VERIFIED PROPER AIR SUPPLY
8602220073	2	PRESSURIZER PRESSURE CHART	
		FAILURE DESCRIPTION:	PRESSURIZER PRESSURE CHART IS NOT FUNCTIONING.
		CORRECTIVE ACTION:	REPLACED FAULTY RIBBON CONNECTOR AND VERIFIED CALIBRATION. PLACED INSERVICE.

WO NO	UNIT	EQUIPMENT IDENTIFICATION	
8602261012	2	CHILLER ISOL VALVE	
		FAILURE DESCRIPTION:	VALVE INDICATION SPINDLE IS LOOSE CAUSING FAILED CONTROL ROOM INDICATION.
		CORRECTIVE ACTION:	FOUND ARM THAT CONTACTS LIMIT SWITCH OPEN AND CLOSED ARMS LOOSE. TIGHTED AND VERIFIED OPEN AND CLOSE LIMIT IN CONTROL ROOM BY HAVING NCO CYCLE VALVE
8512240130	2	2A DIESEL TURBO BOOST	
		FAILURE DESCRIPTION:	TURBO BOOST LINE THAT RUNS ALONG THE DIESEL IS DAMAGED.
		CORRECTIVE ACTION:	REPAIRED AS PER DR SMD-M86-0039.
8602120095	2	CONTAINMENT DIFF PRESSURE	
		FAILURE DESCRIPTION:	AFTER A PRESSURE RELIEF OF 1.5 HRS THE CONTROL ROOM METER INDICATES A POSITIVE PRESSURE.
		CORRECTIVE ACTION:	FOUND TRANSMITTER OUT OF SPEC. DURING CALIBRATION, FOUND IT TO DRIFT. REPLACED WITH NEW TRANSMITTER.

WO NO	UNIT	EQUIPMENT IDENTIFICATION	
8603050937	2	24 SG STEAM PRESSURE	
		FAILURE DESCRIPTION:	2BS-5468 TRIP POINT OUT OF SPEC. REQUIRED TO TRIP "OFF" ON A DECREASING INPUT SIGNAL AT 3.167 VDC +30, -20 MV. AS FOUND VALUE WAS 3.203 VDC. PROBLEM IDENTIFIED DURING CHANNEL FUNCTIONAL TEST, (PROCEDURE 2PD-2.6.062)
		CORRECTIVE ACTION:	REPLACED CAPS C2,3 IN 2PC-546A/B. REPLACED CAPS C23,24 IN 2PM546 BLEAD LAG AMP. COMPLETED FUNCTIONAL, SAT.
8603070091	2	24 CFCU INLET	
		FAILURE DESCRIPTION:	24 SW 58 WILL NOT OPEN FROM CONTROL ROOM.
		CORRECTIVE ACTION:	FOUND VALVE JAMMED IN SEAT. OPENED VLV BY ENGAGING HANDWHEEL. ADJ OPEN LIMIT SW. NCO CYCLED VALVE.
8603070652	2	STRAINER DELTA P	
		FAILURE DESCRIPTION:	DELTA P ACROSS STRAINER IS APPROX. 30 LBS. STRAINER SHEAR KEY APPEARS TO BE BROKEN. SHEAR KEY WAS ROTATING BUT PRESSURE DID NOT GO DOWN.
		CORRECTIVE ACTION:	REPLACED SHEAR KEY & ADJUSTED PACKING 416 DELTA.

WO NO	UNIT	EQUIPMENT IDENTIFICATION
8603100021	2	22 SW PUMP STRAINER
		FAILURE DESCRIPTION: SHEAR KEY IS BROKEN.
		CORRECTIVE ACTION: CHECKED STRAINER FOR FREE MOVEMENT. REPLACED SHEAR KEY.
0099168782	2	RC FLOW LOOP 3 CH III
		FAILURE DESCRIPTION: CHANNEL FOUND OUT OF SPEC.
		CORRECTIVE ACTION: ADJUSTED SETPOINT OF COMPARATION 2FC-436. COMPLETED PROCEDURE 2PD-2.2.012.
0099168791	2	#22 SG STEAM PRESS CH III
		FAILURE DESCRIPTION: CHANNEL FOUND OUT OF SPEC WHILE PERFORMING CHANNEL CAL 2PD-2.2.042.
		CORRECTIVE ACTION: ADJUSTED LEAD/LAG MODULE TO CORRECT OUT OF SPEC READING AND COMPLETED CHANNEL CAL
0099183510	2	2C DIESEL GEN
		FAILURE DESCRIPTION: THE JACKET WATER E:NPW AT #5 CYLINDER ON RIGHT SIDE OF DIESEL GEN. IT IS RUPTURED.
		CORRECTIVE ACTION: REPLACED HOSE & GASKET ON JACKET WTR TO #5 CYLINDER HEAD.

WO NO	UNIT	EQUIPMENT IDENTIFICATION	
8512240130	2	2A DIESEL TURBO BOOST	
		FAILURE DESCRIPTION:	TURBO BOOST LINE THT RUNS ALONG THE DIESEL IS DAMAGED.
		CORRECTIVE ACTION:	REPAIRED AS PER DR SMD-M86-0039.
8602220073	2	PRESSURIZE PRESSURE CHART	
		FAILURE DESCRIPTION:	PRESSURIZER PRESSURE CHART IS NOT FUNCTIONING.
		CORRECTIVE ACTION:	REPLACED FAULTY RIBBON CONNECTOR AND VERIFIED CALIBRATION. PLACED INSERVICE.
8603090017	2	IR NEUTRON LEVEL CH. III	
		FAILURE DESCRIPTION:	IR NEUTRON LEVEL CH.II CONSOLE INDICATION POINTER IS EROKEN OFF.ALSO CONSOLE INDICATION APPEARS TO BE READING LOW, BUT IS READING CORRECTLY IN BACK N.I. RACK.
		CORRECTIVE ACTION:	REPAIRED BROKEN POINTER AND CALIBRATED METER AS PER ICD CARD.
8603241171	2	22 BAT PUMP	
		FAILURE DESCRIPTION:	PUMP HAS A BAD SEAL LEAK.
		CORRECTIVE ACTION:	REPLACED CASING GASKET.

SALEM GENERATING STATION
MONTHLY OPERATING SUMMARY - UNIT NO. 2
MARCH 1986

SALEM UNIT NO. 2

The Unit began the period operating at full power. On 3/07/86 at 0459 hours, power was reduced to 95% due to Circulating Water Screen problems caused by river grasses. The Unit was returned to full power operation at 0520 hours the same day. On 3/12/86, a hydrogen leak was discovered on No. 2 Main Generator. Subsequent investigations revealed the hydrogen leak was associated with the No. 10 Bearing seal. Hydrogen pressure was reduced to 55# where the leakage was within normal operating limits. Operating at the reduced hydrogen pressure required a slight load reduction to 99% to maintain generator operations within the stability curve limits. On 3/17/86 at 2251 hours, power was reduced to 80% due to 23A, 22A and 22B Circulator Screens being out of service due to large quantities of river grasses. The Unit was returned to 99% power operation at 2335 hours the same day. On 3/22/86 at 1755 hours power was reduced to 60% as a result of a suspected oil leak at the inboard of the #22 Steam Generator Feed Pump (SGFP) Turbine. While power was reduced, the mechanical seal for #22 Condensate Pump was replaced. Following repairs to the SGFP turbine and Condensate Seal the Unit was returned to 99% power at 2320 hours on 3/23/86. On 3/24/86, slight load reductions were performed due to river grasses and debris causing circulating water problems. The circulating water problems were corrected the same day and the Unit operated at essentially full power through the remainder of the period.

REFUELING INFORMATION

DOCKET NO.: 50-311
UNIT NAME: Salem 2
DATE: April 10, 1986
TELEPHONE: 609/935-6000
EXTENSION: 4455

COMPLETED BY: J. Ronafalvy

Month March 1986

1. Refueling information has changed from last month:
   YES _____ NO X

2. Scheduled date for next refueling: September 20, 1986

3. Scheduled date for restart following refueling: November 19, 1986

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

   Not determined to date _____

   B) Has the reload fuel design been reviewed by the Station Operating Review Committee?
   YES _____ NO X
   If no, when is it scheduled? August 1986

5. Scheduled date(s) for submitting proposed licensing action:
   August 1986 if required

6. Important licensing considerations associated with refueling:
   NONE

7. Number of Fuel Assemblies:
   A) Incore 193
   B) In Spent Fuel Storage 140

8. Present licensed spent fuel storage capacity: 1170

   Future spent fuel storage capacity: 1170

9. Date of last refueling that can be discharged to spent fuel pool assuming the present licensed capacity: March 2003

8-1-7.R4

PSE&G

Public Service Electric and Gas Company P.O. Box E Hancocks Bridge, New Jersey 08038

Salem Generating Station

April 10, 1986

Director, Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

MONTHLY OPERATING REPORT
SALEM NO. 2
DOCKET NO. 50-311

In compliance with Section 6.9, Reporting Requirements for the Salem Technical Specification, 10 copies of the following monthly operating reports for the month of March 1986 are being sent to you.

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

Sincerely yours,

J. M. Zupko, Jr.
General Manager - Salem Operations

JR:kcb
cc: Dr. Thomas E. Murley
Regional Administrator USNRC
Region I
631 Park Avenue
King of Prussia, PA 19406

Director, Office of Management
Information and Program Control
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Enclosures
8-1-7.R4

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