PSE&G

Public Service Electric and Gas Company P.O. Box 168 Hancocks Bridge, New Jersey 08038

Salem Nuclear Generating Station

June 9, 1978

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

Dear Sir:

MONTHLY OPERATING REPORT
SALEM NO. 1
DOCKET NO. 50-272

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 May, 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

Sincerely yours,

H. J. Midura
Manager - Salem Generating Station

LKM:jcm

cc: Mr. Boyce H. Grier
Director of U. S. NRC
Office of Inspection and Enforcement
Region I
631 Park Avenue
King of Prussia, Pa. 19406

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

Enc.

A008

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-272
UNIT Salem No. 1
DATE 6/9/78
COMPLETED BY L. K. Miller
TELEPHONE 609-365-7000 X507

MONTH May, 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

OPERATING DATA REPORT

DOCKET NO.: 50-272
DATE : 6/9/78
COMPLETED BY: L. K. Miller
TELEPHONE: 609-365-7000 X507

OPERATING STATUS

1. Unit Name: Salem No. 1
2. Reporting Period: May, 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

Notes:

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reason:
None

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	3623	8064
12. Number Of Hours Reactor Was Critical	0	1522.7	4065.9
13. Reactor Reserve Shutdown Hours	0	0	0
14. Hours Generator On-Line	0	1460.1	3890.7
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	4,505,479	11,200,699
17. Gross Electrical Energy Generated (MWH)	0	1,548,500	3,734,810
18. Net Electrical Energy Generated (MWH)	(3,872)	1,467,159	3,525,377
19. Unit Service Factor	0	40.3	48.3
20. Unit Availability Factor	0	40.3	48.3
21. Unit Capacity Factor (Using MDC Net)	0	37.5	40.5
22. Unit Capacity Factor (Using DER Net)	0	37.2	40.1
23. Unit Forced Outage Rate	100	59.7	39.3

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
None

25. If Shut Down At End of Report Period, Estimated Date of Startup: June 17, 1978
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

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH MAY, 1978

DOCKET NO.: 50-272
UNIT NAME: Salem No. 1
DATE: 6/9/78
COMPLETED BY: L. K. Miller
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
78-40	3-15-78	F	744.0	B	1	- - -	HA	Turbine	High Vibration, Main Turbine Bearing No. 3, Unit Shut Down to make necessary turbine repairs.

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 1-Same Source

MAJOR PLANT MODIFICATIONS
REPORT MONTH May, 1978

DOCKET NO.: 50-272
UNIT NAME: Salem 1
DATE: 6/9/78
COMPLETED BY: L. K. Miller
TELEPHONE: 609-365-7000 X507

*DCR NO.	PRINCIPLE SYSTEM	SUBJECT
ED-0009	Liquid Waste Disposal	Replace BFD Relays
ED-0074A	Main Steam - MS 167's	Install Heavy Wall Tubing
ED-0146	Reactor Coolant - 13RCP	Modify No. 3 Seal - Seal Ring
ED-0169	Station Power - SPT	Install Watt Transducer
ED-0204	Auxiliary Annunciator	Revise Alarm Program
ED-0206	Main Steam - MS 169 & 171's.	Modify Control Air Piping
ED-0212	Electrical - 500kV	Remove NHC Relay
ED-0243	Pressurizer Spray - PS 2 & 4.	Replace Valve Topworks
ED-0272	Main Steam - 11MS167, 13MS167, & 14MS167.	Install Keelavite Check Valve in Hydraulic Line
ED-0297	Diesel Generator - 1B	Modify Fuel Lines
ED-0326	CVCS - 1CV4	Install Valve in C.A. Line
ED-0328	Circulating Water	Modify Floor Grids in Waterboxes
ED-0332	Circulating Water	Relocated Outlet RTD's
ED-0347	Main Steam	Install Test Connections
EX-0009	Reactor Coolant - RCP's	Conduct Starting Current Tests
EX-0010	Circulating Water	Conduct Waterbox and Valve Tests
EX-0013	Circulating Water	Conduct Waterbox and Valve Tests
MD-0133	Bleed Steam & Header Drains	Install Split Bearing in No. 12 H.D. Pump
OD-0052	Condenser Air Removal	Install Low Point Drain
PD-0019A	Component Cooling	Modify Control Air Piping for 1CC215
PD-0025	CVCS - BIT	Relocate 1SJ6

* DESIGN CHANGE REQUEST
8-1-7.R1

MAJOR PLANT MODIFICATIONS
REPORT MONTH May, 1978

DOCKET NO.: 50-272
UNIT NAME: Salem Unit #1
DATE: 6/9/78
COMPLETED BY: L. K. Miller
TELEPHONE: 609-365-7000 X507

*DCR NO.	10CFR50.59 SAFETY EVALUATION
ED-0009	This is a change in brand of equipment and not a change in design concept. Criteria for an unreviewed safety question are not met.
EC-0074A	Modification does not downgrade any safety related equipment, aggravate any previously analyzed accident, or change the basis of any technical specification. An unreviewed safety question is not involved.
ED-0146	There is no fundamental change to seal design or function. The change enhances service life. The criteria for an unreviewed safety question are not met.
ED-0169	Safety related equipment will not be affected.
ED-0204	Change does not affect safety function of system. Relocation required to improve system performance. Criteria for an unreviewed safety question are not met.
ED-0206	The equipment performs same function and meets all applicable requirements. The change increases reliability. An unreviewed safety question is not involved.
ED-0212	Safety related equipment will not be effected.
ED-0243	Replacement of valve top works with stronger parts, does not downgrade any safety related equipment, aggravate any previously analyzed accident or change the basis of any technical specification.
ED-0272	Installation of actuator hydraulic tubing check valves does not downgrade any safety related equipment, aggravate any previously analyzed accident, or change the basis of any technical specification.
ED-0297	This modification will not reduce the margin of safety in any Technical Specification, cause an accident or malfunction not previously analyzed in the FSAR, nor increase the probability of occurrence or consequences of such an accident.

* DESIGN CHANGE REQUEST

MAJOR PLANT MODIFICATIONS
REPORT MONTH May, 1978

DOCKET NO.: 50-272
UNIT NAME: Salem #1
DATE: 6/9/78
COMPLETED BY: L. K. Miller
TELEPHONE: 609-365-7000 X507

*DCR NO.	10CFR50.59 SAFETY EVALUATION
ED-0326	The equipment performs the same function and meets all applicable requirements. The Containment Isolation function and fail safe design of valve 1CV4 is not affected by design change.
ED-0328	The modification of this system does not affect any presently performed safety analysis nor does it create any new hazards. The basis of the technical specifications are not affected.
ED-0332	Safety related equipment will not be affected.
ED-0347	This design change does not affect any presently performed Safety Analysis nor does it create any new safety hazards. The basis of the technical specifications are not affected. System is non-safety related.
EX-0009	The performance of this test does not create any abnormal operating condition which could invalidate existing analysis or create new conditions which reduce margins of safety or violate technical specifications basis. The performance of safety related equipment will not be affected.
EX-0010	The implementation of this test does not affect any presently performed safety analysis nor does it create any new hazards. The basis of the technical specifications are not affected.
EX-0013	The implementation of this test does not affect any presently performed safety analysis nor does it create any new hazards. The basis of the technical specifications are not affected.
MD-0133	Safety related equipment will not be affected.
OD-0052	This modification does not change any function of the presently designed system, nor does it create any additional hazard. Criteria for an unreviewed safety question are not met.
PD-0019A	This design change does not change the existing function of the system. The criteria for unreviewed safety question are not involved.
PD-0025	This change necessitates relocating valve 15J6 to a more acceptable area. The definition of an unreviewed safety question has not been met.

* DESIGN CHANGE REQUEST

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Performance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: 6/9/78

COMPLETED BY: L. K. Miller

TELEPHONE: 609-365-7000 X507

WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
PD-4608	1PC936G	Instrument out of spec	Recalibrated
PD-4708	1LI931	Indication out of spec	Recalibrated
PD-4704	1PC937B-F	Instrument out of spec	Recalibrated
OD-7836	1LT529	Redundant channels do not agree.	Recalibrated 1LT529
OD-8671	Valve 1CV132	Open time out of spec	Recalibrated valve positioner.
PD-4729	Valve 12SW58	No open indication	Adjusted limit switch
PD-4717	PI-936B	Indication out of spec	Replaced meter movement
PD-4716	1PI937C	Instrument out of spec	Recalibrated
PD-4713	PI-937A	Indicator out of spec	Recalibrated
PD-4683	TC412E-F	Fuse holder broken	Replaced fuse holder
PD-4610	PT3450	Instrument out of spec	Recalibrated
PD-4609	11, 13 nozzle support vent fans	Leaking solenoids	Replaced SV912 and 914
OD-8783	Valves 11,12,13, 14 AF 21	Valve demand indicator does not agree with feed flows.	Recalibrated demand indicator
OD-8784	AF Press Over ride interlock	Interlocks operate at various pressures	Recal. 11AFP disc press trans.
OD-8810	R.M.S. 1R15	Spiking	Recalibrated detector

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Performance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: 6/9/78

COMPLETED BY: L. K. Miller

TELEPHONE: 609-365-7000 X507

WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
OD-8827	Valve 1WL12	Will not open	Replaced 20X relay coil.
OD-8838	Service Wtr. 16 Pump Screen ΔP	Reads ΔP with pump out of service	Blew out line for bubbler
PD-4721	TE944A	High reading.	Recalibrated
PD-4743	TM412C	No output change	Replaced
OD-8374	Tref Indicator	Reading High @ 100% Rx Power	Tref Recorder out of calibration
OD-8754	12 BAT Heater	Remains energized ≥200°F	Replaced bulbs in heater contactor panel
OD-8807	1TC944	Read 115° with all heaters off	Replace TC944 contact assembly
OD-8861	Service Wtr. 15 Pump	Screen diff. reading downscale	Blew back feeler line
OD-8883	Valve 1CH30	No open indication	Rebuilt SV761
OD-8902	TM-412C	Loop 11 OTΔT Set Pt. pegged high	Replaced summator
MD-2678	Valve 1SJ79	Valve disassembled	Stroked valve

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Maintenance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: 6/9/78

COMPLETED BY: L. K. Miller

TELEPHONE: 609-365-7000 X507

WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
OD-4995	Valve 1SJ13	Packing leak	Repacked valve
OD-8105	Valve 1CV68	Packing leak	Repacked valve
OD-5844	Valve 1SJ908	Drain valve & line plugged	Unplugged valve
OD-5838	Valve 1WR70	Diaphragm leaks	Replaced diaphragm
OD-4996	Valve 1SJ12	Packing leak	Repacked valve
OD-8559	Valves 11SJ136 and 137	Packing leak	Repacked valves
MD-2572	Valves 1SJ117 & 74	Boron hardened gland	Repacked valves
OP-260	Valve 11CV108	Packing leak	Repacked valve
OP-255	Valves 11 & 12SJ14, 11SJ15, 136 and 137	Packing leak	Repacked valves
MD-0784	Fuel Handling	Walkway binds	Repaired walkway
MD-2535	Valve 1SJ7	Drain valve plugged	Unplugged valve
OD-8410	Valve 1SS107	Valve bonnet leaks	Replaced bonnet gasket
OD-3007	Valve 1CV8	Valve leaks through	Repaired valve
OD-3931	Valve 13SW24	Valve binding closed	Repaired valve
OD-7247	Valve 1CV6	Flange leak	Repaired valve

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Maintenance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

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WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
MD-2454	Valves 12 and 13 BF23	Packing leak	Repacked valves
MD-2635	PD6214 & 6215 PD3399 & 3400 PD3401 & 3402	Out of calibration	Calibrated
MD-2636	PD-2731	Out of calibration	Calibrated
MD-2637	LD-2455 LD-3601-1	Out of calibration	Calibrated
OD-8848	Service Wtr. 14 Strainer	Shear pins snapped	Replace shear pins
OD-8774 OP-304	Main Steam Gen.	Inspect for oil leaks	Repaired oil leaks
MD-2686	1A1 28V Bat. Chgr.	Repair 1A1 28VDC bat. chgr.	Replace control boards
MD-2691	1B Vital Invertor	Failed during test of vital bus	Replaced fuse F1
OD-8931	Valve 11SJ40	Unable to open from control room.	Replaced aux. contact
OD-8926	Service Wtr. 11 Screen	Only runs in "INCH"	Lubricated switch
MD-2690	1D Vital Invertor	Failed test of vital bus	Replaced fuses.
OD-8872	11 Fan Coil Unit	Low Speed Bkr.cannot be racked out	Tack welded positioning gear
MD-2565	Valves 1SS48 and 63	Repacking leak	Repacked valves

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Maintenance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: 6/9/78

COMPLETED BY: L. K. Miller

TELEPHONE: 609-365-7000 X507

WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
OD-8922	Service Wtr. 14 Strainer	Broken shear key	Replaced shear key and buttom guide feet.
MD-2698	#12 Reactor Coolant Pump	Remove 100 shims from #3 seal	Removed shims
OD-8935	Service Water 15 Pump	Packing leak	Repacked pump
OD-8923	Valve 1SJ1	Unable to open from control room	Replaced burnt motor and overloads
MD-2716	#1 Emerg. Air Compressor	Calibrate agastat	Recalibrated
MD-2441	Valves 1CV2, 5, 75, 79	Packing leaks	Repacked valves
MD-2707	SJ,RH,CV,SW & CS Motor of VA'S	Install motor	Installed motor
MD-2675	Polar Crane	Machine pinion shaft	Machined shaft
OD-8934	Valve 1SJ7	Line plugged	Unplugged line

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Maintenance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: 6/9/78

COMPLETED BY: L. K. Miller

TELEPHONE: 609-365-7000 X507

WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
OD-8717	Service Wtr. 15 Strainer	Broken shear key	Replaced shear key
OD-8745	1CCDC Deion #39	When open, ground on 1B & 1C 125VDC bus clears	Pin wire on solenoid valve repaired wire.
OD-8734	Valve 11CC2	Packing leak	Repacked valve
OD-8732	11 Chiller	Auto-Run light out	Replaced CMC switch
OD-8833	Valve 1RH26	No closed indication	Readjusted rotor contact
OD-8844	Service Wtr. 16 Strainer	Broken shear key	Replaced shear key
OD-8744	1A Diesel	Jacket Wtr. heater does not open	Recalibrate TD-7333 and TD-6464
OD-8276	Valve 11CC3	Packing leak	Repacked valve
OD-8815	11 Chrg. Pump Aux. Oil Pump	Pump runs continuously	Replaced #3 operator
OD-8876	Boric Acid Evaporator	Rupture disc. blown	Replaced rupture disc
OD-8735	Valve 12CC8	Packing leak	Repacked valve
MD-7537	Valve 12CCHX	Inspect tubes	Plugged 10 tubes.
OD-8814	1C Diesel	Trips on overcrank	Lubricated governor
MD-2521	11 Reactor Coolant Pump	Inspect seals	Replaced #2 and #3 seal

SUMMARY OF SAFETY RELATED MAINTENANCE

DEPARTMENT Maintenance

REPORT MONTH May, 1978

DOCKET NO.: 50-272

UNIT NAME: Salem #1

DATE: 6/9/78

COMPLETED BY: L. K. Miller

TELEPHONE:

WORK ORDER NO.	EQUIPMENT	FAILURE DESCRIPTION	CORRECTIVE ACTION
OD-8619	Valve 12CV163	Ruptured diaphragm	Replaced diaphragm
OD-8556	Valve 11MS2	Packing leak	Repacked Valve
OD-5148	11 & 12 RH29, 30 and 44 12RH16 1RH26	Valves leak through	Repaired valve
OP-257	Valves 12SJ21 and 26 11 and 13 SJ21	Packing leak	Repacked valves
OP-258	Valves 11, 12 and 14 SJ23	Packing leak	Repacked valves
OP-259	Valve 12 SJ266	Packing leak	Repacked valve
OP-262	Valve 1SJ312	Packing leak	Repacked valve
MD-2570	Valve 1SJ4	Packing leak	Repacked valve
MD-1654	Valve 12RC20	Valve leaks through	Repacked valve
OD-8636	Valves 1SJ4 & 5	Valves leak through	Increased Torque Switch setting
OP-281	Valve 11CV160	Inspect for foreign material	Removed center piece of a diaphragm from cage
OD-8708	Valve 11SW122	Packing leak	Repacked valve
OD-8771	Line between	Line plugged	Unplugged line
MD-2659	Valves 11SJ136	Valves leak through	Tightened packing gland.

MONTHLY OPERATING SUMMARY

SALEM I

MAY, 1978

5/1-31 The unit was out the entire month due to the continuation of outage for the purpose of making turbine repairs. Estimated date of startup is June 17, 1978.

REFUELING INFORMATION

DOCKET NO.: 50-272
UNIT: Salem No. 1
DATE:
COMPLETED BY: L.K. Miller
TELEPHONE: 609-365-7000 Ext. 507

MONTH: May, 1978

1. Refueling information has changed from last month:

   YES ____ NO X

2. Scheduled date of next refueling: April 1, 1979
3. Scheduled date for restart following refueling: May 29, 1979
4. A. Will Technical Specification changes or other license amendments be required? YES ____ NO ____

   NOT DETERMINED TO-DATE May, 1978

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

   If no, when is it scheduled? January, 1979
5. Scheduled date(s) for submitting proposed licensing action:

   February, 1979 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: 1,170
9. Date of last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: April, 1982