



PSEG

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Salem Generating Station

June 12, 1989

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

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

In compliance with Section 6.9.1.6, Reporting Requirements for the Salem Technical Specifications, the original copy of the monthly operating reports for the month of May 1989 are being sent to you.

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

Sincerely yours,

L. K. Miller
General Manager -
Salem Operations

RH:sl

cc: Mr. William T. Russell
Regional Administrator USNRC
Region I
631 Park Avenue
King of Prussia, PA 19406

Enclosures
8-1-7.R4

IE24
1/1

8906210067 890531
PDR ADOCK 05000272
R PNU

The Energy People

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-272
Unit Name Salem # 1
Date 6-08-89
Telephone 609-935-6000
Extension 4451

Completed by Art Orticelle

Month MAY 1989

Day Average Daily Power Level
(MWe-NET)

Day Average Daily Power Level
(MWe-NET)

1 0
2 0
3 0
4 0
5 0
6 0
7 0
8 0
9 0
10 0
11 0
12 0
13 0
14 0
15 0
16 0

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

OPERATING DATA REPORT

Docket No. .50-272
 Date: 6-08-89
 Telephone: 935-6000
 Extension: 4451

Completed by Pell White

Operating Status

1. Unit Name	<u>Salem No. 1</u>	<u>Notes</u>
2. Reporting Period	<u>May 1989</u>	
3. Licensed Thermal Power (MWt)	<u>3411</u>	
4. Nameplate Rating (Gross MWe)	<u>1170</u>	
5. Design Electrical Rating (Net MWe)	<u>1115</u>	
6. Maximum Dependable Capacity (Gross MWe)	<u>1149</u>	
7. Maximum Dependable Capacity (Net MWe)	<u>1106</u>	
8. If Changes Occur in Capacity Ratings (items 3 through 7) since Last Report, Give Reason	<u>N/A</u>	

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

10. Reasons for Restrictions, if any N/A

	<u>This Month</u>	<u>Year to Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	<u>744</u>	<u>3623</u>	<u>104496</u>
12. No. of Hrs. Reactor was Critical	<u>0</u>	<u>1862.33</u>	<u>66494.5</u>
13. Reactor Reserve Shutdown Hrs.	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>0</u>	<u>1811.75</u>	<u>64447.65</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>0</u>	<u>6106848</u>	<u>201543640.4</u>
17. Gross Elec. Energy Generated (MWH)	<u>0</u>	<u>2039200</u>	<u>66986380</u>
18. Net Elec. Energy Generated (MWH)	<u>-3722</u>	<u>1941373</u>	<u>63747497</u>
19. Unit Service Factor	<u>0</u>	<u>50.0</u>	<u>61.7</u>
20. Unit Availability Factor	<u>0</u>	<u>50.0</u>	<u>61.7</u>
21. Unit Capacity Factor (using MDC Net)	<u>0</u>	<u>48.4</u>	<u>55.2</u>
22. Unit Capacity Factor (using DER Net)	<u>0</u>	<u>48.1</u>	<u>54.7</u>
23. Unit Forced Outage Rate	<u>0</u>	<u>12.2</u>	<u>22.1</u>

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

NONE

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

Estimated date to synchronize is June 15, 1989.

UNIT SHUTDOWN AND POWER REDUCTIONS
 REPORT MONTH MAY 1989

Docket No. 50-272
 Unit Name Salem No.1
 Date 6-08-89
 Telephone 609-935-6000
 Extension 4451

Completed by Art Orticelle

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
0071	5-01-89	S	720.02	C	4	-----	CA	VESSEL	NUCLEAR REACTOR OVERHAUL
0071	5-01-89	S	720.02	C	4	-----	HA	GENERA	GENERATOR MAJOR OVERHAUL
0071	5-01-89	S	720.02	C	4	-----	HA	TURBIN	MAJOR TURBINE OVERHAUL
0072	5-31-89	S	23.98	F	4	-----	ZZ	ZZZZZZ	SCHEDULED OUTAGE EXTENSION

1	2 Reason	3 Method	4 Exhibit G	5 Exhibit 1
F: Forced	A-Equipment Failure-explain	1-Manual	Instructions	Salem as
S: Scheduled	B-Maintenance or Test	2-Manual Scram.	for Prepara-	Source
	C-Refueling	3-Automatic Scram.	tion of Data	
	D-Regulatory Restriction	4-Continuation of	Entry Sheets	
	E-Operator Training & Licensing Exam	Previous Outage	for Licensee	
	F-Administrative	5-Load Reduction	Event Report	
	G-Operational Error-explain	9-Other	(LER) File	
	H-Other-explain		(NUREG 0161)	

PSE&G SALEM GENERATING STATION
SAFETY RELATED WORK ORDER LOG

SALEM UNIT 1

WO NO	UNIT	EQUIPMENT IDENTIFICATION
870707028	1	1C-460 XFMR COOLING FANS FAILURE DESCRIPTION: 1C-460 TRANSFORMER COOLING FANS NOT WORKING IN AUTOMATIC.
880111163	1	14SJ28 REPLACE MARK NO. FA-15 FAILURE DESCRIPTION: IS LEAKING PAST ITS SEATS. REPLACE VALVE.
881212141	1	11SJ40-DCR FAILURE DESCRIPTION: 11SJ40-DCR TO DRILL WEEP HOLES FOR PRESS. EQUALALIZATION.
890127108	1	DCP-1SC-2032 FAILURE DESCRIPTION: INSTALL DCP-1SC-2032 VITAL & ESSENTIAL INVERTERS.
890128079	1	NO. 11 CONTAINMENT FAN COIL UNIT PIPING. (INSTL) FAILURE DESCRIPTION: IMPLEMENT DCP 1EC-2270 TO REPLACE EXISTING PIPING.
890128080	1	NO. 12 CONTAINMENT FAN COIL UNIT PIPING. (INSTL) FAILURE DESCRIPTION: IMPLEMENT DCP 1EC-2270 TO REPLACE EXISTING PIPING.

SALEM UNIT 1

WO NO	UNIT	EQUIPMENT IDENTIFICATION
890128081	1	NO. 13 CONTAINMENT FAN COIL UNIT PIPING. (INSTL) FAILURE DESCRIPTION: IMPLEMENT DCP 1EC-2270 TO REPLACE EXISTING PIPING.
890128082	1	NO. 14 CONTAINMENT FAN COIL UNIT PIPING. (INSTL) FAILURE DESCRIPTION: IMPLEMENT DCP 1EC-2270 TO REPLACE EXISTING PIPING.
890128083	1	NO. 15 CONTAINMENT FAN COIL UNIT PIPING. (INSTL) FAILURE DESCRIPTION: IMPLEMENT DCP 1EC-2270 TO REPLACE EXISTING PIPING.
890206116	1	1EC-02245 FAILURE DESCRIPTION: LOGIC CHANGE/DELETE 1/4 RCP BREAKER TRIP.
890206120	1	1SC-01185 FAILURE DESCRIPTION: RCP MOTOR UNDERVOLTAGE TRIP-MODIFY CIRCUT TO INCLUDE CONDENSATE PUMPS.
890207165	1	DCP-1EC-2272 FAILURE DESCRIPTION: INSTALL DCP-1EC-2272 SEQUENCE OF EVENTS RECORDER.

SALEM UNIT 1

WO NO	UNIT	EQUIPMENT IDENTIFICATION
890215107	1	DCP-1SC-2028
		FAILURE DESCRIPTION: IMPLEMENT DCP-1SC-2028 REPLACE MAIN STEAM SAFETY VALVES.
890328114	1	1EC2192/P-9
		FAILURE DESCRIPTION: DELETE REACTOR TRIP FOLLOWING A TURBINE TRIP BELOW 50%.
890331079	1	DCP-1SC-2028
		FAILURE DESCRIPTION: IMPLEMENT DCP-1SC-2028 REPLACE MAIN STEAM SAFETY VALVES.
890417187	1	1CC215
		FAILURE DESCRIPTION: FAILED LEAK RATE/REPAIR/MARK NO. X-20.
890420106	1	1SM-581
		FAILURE DESCRIPTION: REPLACE RCP OVERCURRENT RELAY'S ADJUST AS PER DCR.
890424006	1	TYPE C LEAK RATE TESTING
		FAILURE DESCRIPTION: PERFORM TYPE C LEAK RATE TESTING ON CONTAINMENT ISOLATION VALVES.

SALEM UNIT 1

WO NO UNIT EQUIPMENT IDENTIFICATION

890502071

1 #14 CFCU MCR-114

FAILURE DESCRIPTION: REPAIR LEAK IN THE 10" RETURN PIPE.

890524091

1 15SW223

FAILURE DESCRIPTION: 15 CFCU VLV/BROKEN POSITIONER LINKAGE/REWORK.

MAJOR PLANT MODIFICATIONS
REPORT MONTH MAY 1989

DOCKET NO.: 50-272
UNIT NAME: Salem 1
DATE: June 10, 1989
COMPLETED BY: P. White
TELEPHONE: 609/339-4455

<u>*DCR NO.</u>	<u>PRINCIPAL SYSTEM</u>	<u>DESCRIPTION</u>
1EC-02298	Reactor Head	This design change Modified the three reactor vessel head adapter (spares) at the location of identified leaks, by weld buildup over the canopy seal weld.
1SM-00230	UV Relays	This design change changed the setpoint of the undervoltage relays on the 4KV Vital Busses to ensure that voltage at the 4160V motor terminals will not drop below 90% for more than 15 seconds.
1SM-00770	500KV Brkrs.	This design change installed new solid state breaker failure relays for the remaining 500KV breakers. Breaker 21X was previously modified by DCR 1EC-2273.

* DCR - Design Change Request

MAJOR PLANT MODIFICATIONS
REPORT MONTH MAY 1989

DOCKET NO.: 50-272
UNIT NAME: Salem 1
DATE: June 10, 1989
COMPLETED BY: P. White
TELEPHONE: 609/339-4455

*DCR

SAFETY EVALUATION 10 CFR 50.59

1EC-02298

This design change modified the three reactor vessel head adapter (spares) at the location of identified leaks, by weld buildup over the canopy seal weld. There was no change to any plant process or discharge or to the environmental impact of the plant. No unreviewed safety or environmental questions are involved.

1SM-00230

This design change changed the setpoint of the undervoltage relays on the 4KV Vital Busses to ensure that voltage at the 4160V motor terminals will not drop below 90% for more than 15 seconds. This will help to ensure no damage occurs to these motors from an undervoltage condition. There was no change to any plant process or discharge or to the environmental impact of the plant. no unreviewed safety or environmental questions are involved.

1SM-00770

This design change installed new solid state breaker failure relays for the remaining 500KV breakers. Breaker 21X was previously modified by DCR 1EC-2273. This design change allows Salem and Hope Creek Stations to operate at 100% power (2) distribute their power to the PJM grid via the existing transmission lines, and (3) maintain PJM grid stability during steady state and transient conditions. There was no change to any plant process or discharge or to the environmental impact of the plant. No unreviewed safety or environmental questions are involved.

* DCR - Design Change Request

SALEM GENERATING STATION
MONTHLY OPERATING SUMMARY -- UNIT NO. 1
MAY 1989

SALEM UNIT NO. 1

The Unit was shutdown for the entire period for a refueling outage. Major work accomplished during the period included the following:

1. Fuel Insert changeouts, Core reload and Reactor reassembly;
2. Steam Generator tube plugging;
3. Installation of No. 11 Low Pressure Turbine rotor and Turbine reassembly;
4. Installation of the new Main Transformer, and
5. Reactor Coolant System fill and vent

On may 20, 1989, during a scheduled accumulator discharge valve test, nitrogen gas was inadvertently injected into the RCS. This resulted in a loss of shutdown cooling due to gas binding of the Residual Heat Removal Pumps. Prompt Operator action restored core cooling within 38 minutes. An investigation into the event is in progress.

REFUELING INFORMATION

COMPLETED BY: P. White DOCKET NO.: 50-272
 UNIT NAME: Salem 1
 DATE: June 10, 1989
 TELEPHONE: 609/935-6000
 EXTENSION: 4497

Month MAY 1989

1. Refueling information has changed from last month:
 YES X NO _____
2. Scheduled date for next refueling: March 28, 1989
3. Scheduled date for restart following refueling: May 24, 1989
4. A) Will Technical Specification changes or other license amendments be required?
 YES _____ NO _____
 NOT DETERMINED TO DATE X
- B) Has the reload fuel design been reviewed by the Station Operating Review Committee?
 YES X NO _____
 If no, when is it scheduled? _____
5. Scheduled date(s) for submitting proposed licensing action:
N/A
6. Important licensing considerations associated with refueling:
NONE

7. Number of Fuel Assemblies:
 A) Incore 193
 B) In Spent Fuel Storage 540
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: September 2001