AVERAGE DAILY UNIT POWER LEVEL

Docket	No.	50-2	72
Unit N	ame	Salem	1 # 1
Date	Sep	t. 10,	1983
Teleph	one6	09-935-	6000
Entens	ion	4455	

Completed by L. K. Miller			tension 4455
Mor	August 1983		
Day	Average Daily Power Level (MWe-NET)	Day Average Dai: (MWe-NET)	ly Power Level
1	1076	161066	
2	1070	171079	
3	1074	181051	
4	1062	191049	
5	1069	201065	_
6	1063	21 1061	
7	1007	22463	
8	969	23 0	_
9	1024	240	
10	1039	250	
11	283	26694	
12	0	271057	
13	0	28 1064	
14	102	291079	
15	1001	30 1075	
		31 1066	_

P. 8,1-7 R1

OPERATING DATA REPORT

Docket	No.	50-27	72
Date	Sept.	10, 1	1983
Teleph	one	935-6	5000
Extens	ion	445	55

Completed by L. K. Miller

Operating Status

1. 2. 3. 4. 5. 6. 7. 8.		e) <u>1090</u> s MWe) <u>1124</u> MWe) <u>1079</u> ings (items)	<u>Notes</u> 3 through 7) si	nce Last
		N/A		
9.	Power Level to Which Restricted,	if any (Net	MWe) N/A	<u></u>
10.	Reasons for Restrictions, if any	N/A		
		This Month	Year to Date	Cumulative
11.	Hours in Reporting Period	744	5831	54840
	No. of Hrs. Reactor was Critical	608.0	2566.0	30291.1
	Reactor Reserve Shutdown Hrs.	0	2033.4	3006.5
14.	Hours Generator On-Line	578.1	2302.4	28950.3
	Unit Reserve Shutdown Hours	0	0	0
	Gross Thermal Energy Generated (MWH)	1870906	7409224	86579415
17.	Gross Elec. Energy Generated	619760	2488200	28453050
10	(MWH) Net Elec. Energy Generated (MWH)	589725	2341823	26936676
	Unit Service Factor	77.7	39.5	53.5
	Unit Availability Factor	77.7	39.5	53.5
	Unit Capacity Factor			
	(using MDC Net)	73.5	37.2	46.1
22.	Unit Capacity Factor			
	(using DER Nat)	72.7	36.8	45.6
	Unit Forced Outage Rate	22.3	53.1	30.9
24.	Shutdowns scheduled over next 6 m	months (type	, date and dura	tion 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	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

UNIT SHUTDOWN AND POWER REDUCTIONS **REPORT MONTH AUGUST 1983**

Docket No. 50-272 Unit Name Salem Nc.1 Sept. 10, 1983 Date Telephone 609-935-6000 Extension 4455

Completed by L.K. Miller

No.	Date	Type 1	Duration Hours	Reason 2	Method of Shutting Down Reactor	License Event Report	System Code 4	Component Code 5	A Preve	ction nt Re	currence
83-196	8/2	F	4.8	В	5	-	HF	FILTER	Trash		
83-198	8/5	n	10.5	"		п	HF		11	n	
83-200	8/6	"	3.9	u	n		"	"			
83-202	8/6	"	6.0			"	п		"	"	
83-204	8/7		36.4	п	"						System
83-206	8/7		32.6	н	n	л		и		Rack	Screens/
83-208	8/8		5.7		"	п		"	"		
83-210	8/8	"	2.7	п	н	"		"		"	
83-212	8/8		43.2	n	"	"	"		"	"	" Tube and
83-214	8/9		5.0	н	н	"	НН	HTEXCH			Cleaning

1

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

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UNIT SHUTDOWN AND POWER REDUCTIONS **REPORT MONTH AUGUST 1983**

Docket No. 50-272 Unit Name Salem No.1 Sept. 10, 1983 Date Telephone 609-935-6000 Extension 4455

Completed by L.K. Miller

No.	Date	Type	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
83-216	8/10		.5				FF	FILTER	Traveling Screens/ Trash Rack Canal Screen
83-218	8/11		2.4	В	н		НН	HTEXCH	Condenser Tube and Waterbox Cleaning
83-220	8/11	F	2.5	в	5		НН	HTEXCH	Condensate Tube and Waterbox Cleaning
83-222	8/11	F	81.2	A	3		HF	FILTER	Auto Trip Traveling Screen
83-224	8/16	F	8.0	в	5				Traveling Screens/ Trash Rack Canal Screen
83-226	8/18		3.0		9	н	HF	FILTER	
83-228	8/18	n	3.1			и		"	
83-230	8/18		91.5	п	5	"	НА	MECFUN	Turbine Governing System Control
83-232			16.2		9	"	HF	FILTER	Traveling Screen/ Trash Rack Canal Screen
83-234	8/20		9.4		"		12		

1

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

UNIT SHUTDOWN AND POWER REDUCTIONS REPORT MONTH AUGUST 1983

Docket No. 50-272 Unit Name Salem No.1 Date Sept. 10, 1983 Telephone 609-935-6000 Extension 4455

Completed by L.K. Miller

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
83-236	8/21		2.5		н		нн	HTEXCH	Water Box Cleaning
83-238	8/22	а	92.8		5	н	НА	MECFUN	Sy Lem Controls
83-240	8/22		84.7	А	3		п		Auto Trip-Turbine Governing Controls
83-242	8/27		3.7	В	5	H	HF	FILTER	Traveling Screen/ Trash Rack Canal Screen
83-244	8/27		4.9		п	n	н		и и и
83-246	8/29		.5	4			НА	MECFUN	Turbine Valve Test

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	<pre>2-Manual Scram. 3-Automatic Scram. 4-Continuation of Previous Outage</pre>	Entry Sheets	Salem as	1
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MAJOR PLANT MODIFICATIONS

REPORT MONTH AUGUST 1983

DOCKET NO:	50-272
UNIT NAME:	SALEM 1
DATE:	SEPTEMBER 10, 1983
COMPLETED BY :	L. K. MILLER

TELEPHONE: (609) 935-6000 Ext. 4455

*DCR NO.	PRINCIPLE SYSTEM	SUBJECT
1EC-1533	Building and Equipment Drains, Flood and Sump Pumps	Change nuclear classification of containment sump pumps from Nuclear Class III to Non-Nuclear Safety.
1SC-0776	Structural	Administration Building El. 116.5' - Redesign locker room on second floor to be a new office area for Operations staff.

* DESIGN CHANGE REQUEST 8-1-7.R1

MAJOR PLANT MO REPORT MONTH	DIFICATIONS AUGUST 1983	DOCKET NO.: UNIT NAME: DATE: COMPLETED BY: TELEPHONE:	50-272 Salem 1 September 10, 1983 L.K. Miller 609/935-6000 X4455
*DCR NO.	10CFR50.59	SAFETY E	VALUATION

- 1EC-1533 The Containment sump pumps themselves are not part of a safety related system and do not affect the safe shutdown of the plant. This DCR has no effect on the plant discharge. No unreviewed safety or environmental questions are involved.
- 1SC-0776 This DCR covers work in an area not related to safety related buildings or equipment. This DCR does not affect any releases from the structure. No unreviewed safety or environmental guestions are involved.

* Design Change Request

WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICA	FION
922302	MD	•	12SW237 PIPE LEAK	
			FAILURE DESCRIPTION:	PIPING (3/4") BETWEEN VALVE AND 30" HEADER HAS A HOLE IN IT. WITH THAT BAY IN SERVICE LEAKAGE EXCEEDS SUMP PUMP CAPACITY. 830516
5.0			CORRECTIVE ACTION:	GROUND OLD PIPE AND FLANGE OUT OF SYSTEM. FITTED WITH ALL NEW PARTS. 830616
931038	MD	1	1D VIL INST INVRIR	
			FAILURE DESCRIPTION:	TROUBLE SHOOT POWER SPIKES FROM 1D VITAL INSTRUMENT INVERTER. 830428
			CORRECTIVE ACTION:	REPLACED KI RELAY W/RELAY FROM 2D VITAL IN ST. INVEPTER. CHECKED TIMER CAL AND OPERATION OF A/C OUTPUT BKR. PERFORMED M4J. 830505
933794	MD	1	12 BAT PUMP	
			FAILURE DESCRIPTION:	12 BAT PUMP FAILED SP(O) 4.0.5-P. ADJUST PUMP FOR FLOW AND PRESSURE. 830731
			CORRECTIVE ACTION:	SET IMPELLER CLEARANCE TO .012. 830731
933805	MD	1	15 SW PMP STRAINER	
			FAILURE DESCRIPTION:	15 SW PUMP STRAINER HAS A BROKEN SHEAR PIN. 830806
			CORRECTIVE ACTION:	REPLACED SHOES AND SHEAR KEY. 830808
933829	MD	1	14 FAN COIL UNIT	
			FAILURE DESCRIPTION:	BACK DRAFT DAMPER STUCK CLOSED. 830809
			CORRECTIVE ACTION:	GREASED DAMPERS AND WORKED THEM FREE. 830810

WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICAT	ION
937852	MD	1	1 AFW PMP RM COOLER	
			FAILURE DESCRIPTION:	1 AUX FEED PMP RM CLR IS LEAKING BADLY. HAS BEEN ISOLATED FOR SHIFT SUPERVISOR. 830721
			CORRECTIVE ACTION:	REPAIRED & REPLACED TUBE TURNS. 830812
937854	MD	1	12 BORIC ACID XFRPMP	
			FAILURE DESCRIPTION:	12 BORIC ACID TRANSFER PMP HAS A BAD SEAL LEAK. 830721
<u></u>	6.57		CORRECTIVE ACTION:	REPLACED MECHANICAL SEAL, REINSTALLED & REALIGNED PUMP. 830730
937903	MD	1	1C D/G SW TO COOLERS	
			FAILURE DESCRIPTION:	INLET LINE LEAKING SERVICE WIR FROM UPPER FLANGE OF 13SW39. 830727
			CORRECTIVE ACTION:	REPAIRED HOLE IN LINE. 830809
938125	MD	1	15 CON FCU SW LK	
			FAILURE DESCRIPTION:	OUTLET SW LINE BEFORE 15SW223 APPROX 4" HOLE IN PIPE. 830728
			CORRECTIVE ACTION:	PAD WELDED OUTSIDE OF SW LINE, BELZONA INSIDE. REMOVED TUEE BUNDLE FROM 15SW23 & PERFORMED SATISFACTORY MT & INSERVICE HYDRO. 830809
919676	PD	1	RMS R11 & 12 APD	
			FAILURE DESCRIPTION:	LACK OF DETECTOR RESPONSE WHEN DETECTOR PLACED IN PLANT VENT MODE. 821017
			CORRECTIVE ACTION:	SENSING LINE ACCIDENTLY DISCONNECTED AND PLUGGED DURING DCR 1ED-0014. ALSO RELIEF VALVE LEAKING. REPAIRED RELIEF VALVE AND RECONNECTED SUCTION LINE. 8303.

SALEM UNIT 1

NO NO DEPT UNIT EQUIPMENT IDENTIFICATION						
922016	MD	1	VALVOP, 1SJ67 FAILURE DESCRIPTION: CORRECTIVE ACTION:	VALVE OPERATOR BROKEN. 830116 REPLACED MANUAL HANDWHEEL BEAR AND TORQUE SWITCH. TESTED SAT. 830117		
922275	MD	1	13 CC PUMP FAILURE DESCRIPTION: CORRECTIVE ACTION:	OUTBOARD SEAL LEAKING. 830525 REPLACED OUTBOARD SEAL AND THRUST BEARING. 830526		
922373	MD	1	13 CC PUMP FAILURE DESCRIPTION: CORRECTIVE ACTION:	PUMP HAS BAD SEAL LEAK. 830518 REPLACED INBOARD SEAL. 830526		
922522	PD	1	PRZR LEVEL FAILURE DESCRIPTION: CORRECTIVE ACTION:	PZR LEVEL INITIATES LOW ALARM ON OVERHEAD, GIVES LETDOWN ISOLATION WITH NO INDICATED LEVEL CHANGE. CONDITION OCCURS WITH ANY CHANNEL SELECTED. 830505 REPLACED LEAKING CAPACITORS C8 AND C9 IN ISOLATOR 11M-459E S/N 584. TEST SAT. 830527		
922600	MD	1	CONT AIR LOCK EL 100 FAILURE DESCRIPTION: CORRECTIVE ACTION:	FAILED SEAL CHECK. 830513 REPLACED SEALS AND ADJUSTED DOOR. 830514		
922621	MD	1	15 SW PUMP STRAINER FAILURE DESCRIPTION: CORRECTIVE ACTION:	STRAINER HAS 25 PSI DIFFERENTIAL. 830510 CLEANED TUBES AND REPLACED SHOES. 830510		

Page 11 of 17

WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICAT	ION
922659	MD	1	16 SW PUMP STRAINER FAILURE DESCRIPTION: CORRECTIVE ACTION:	STRAINER HAS BROKEN SHEAR PIN. 830525 REPLACED UPPER DISTRIBUTION PLATE AND UPPER WEAR SHOES. 830526
922917	PD	1	VALVOP, 12RH18 FAILURE DESCRIPTION: CORRECTIVE ACTION:	VALVE HAS SHUT INDICATION ON CONTROL BOARD. 830316 REPLACED BAILEY POSITIONER, CALIBRATED AND STROKED SAT. 830322
922924	PD	1	RMS 1R21 FAILURE DESCRIPTION: CORRECTIVE ACTION:	1R21 HAS FAILED. 830316 REPLACED DETECTOR AND CALIBRATED. 830316
922934	PD	1	VALVE 11SW305 FAILURE DESCRIPTION: CORRECTIVE ACTION:	VALVE DOES NOT WORK PROPERLY IN AUTO. 830315 THE PRESSURE CONTROLLER SETPOINT WAS SET AT 142 PSI INSTEAD OF 130 PSI. RESET TO 130 PSI AND CHECKED OPERATION SAT. 830315
923072	PD	1	VALVOP, 13MS18 FAILURE DESCRIPTION: CORRECTIVE ACTION:	ACTUATOR DIAPHRAGM BLOWN OUT. 830310 REPLACED DIAPHRAGM AND ACTUATOR PACKING. STROKE CHECKED SAT. 830301
923100	PD	1		CHANNEL FAILED HIGH. 830306 REPLACED AICA'S IN LOCAL CONTROLLER. 830307

WO NO	DEPT	UNIT	EQUIPMENT IDENTIFICATION	
923133	PD	1	RMS APD (R11 & 12) FAILURE DESCRIPTION: APD BREAKER KEEPS TRIPPING. 830226 CORRECTIVE ACTION: INSTALLED NEW CONDE APD PUMP. 830228	
923179	PD	1	VALVOP, 1PS1 FAILURE DESCRIPTION: VALVE WILL NOT CONTROL IN AUTO. 830217 CORRECTIVE ACTION: REPLACED MAN/AUTO MODULE AND CONTROLLER 1PC-455F. 830222	
923199	PD	1	12 ACCUMULATOR PRESS FAILURE DESCRIPTION: PRESSURE ALARM CHB IN ALARM. PRESSURE INDICATION IN SPEC. 830220 CORRECTIVE ACTION: REPLACED COMPARATOR S/N 60-232 WITH S/N 624. 830221	
923206	PD	1	VALVOP, 1CV35 FAILURE DESCRIPTION: VALVE CONTROLLER IS TRIPPED TO MANUAL AND WILL NOT GO INTO AUTO. 830220 CORRECTIVE ACTION: REPLACED CAPACITORS C21, C26 AND TRANSISTOR Q19 IN POWER SUPPLY OF CONTR 11C-114B S/N 277. 830221	
923512	MD	1	VALVE 12MS175 FAILURE DESCRIPTION: VALVE HAS BROKEN STEM. 830318 CORRECTIVE ACTION: CUT OUT BONNET, REPLACED DISC AND STEM AND RE-WELDED BONNET. 830402	

WO NO	DEPT	UNIT	FQUIPMENT IDENTIFICATION
923536	PD	1	RMS 1R41A
			FAILURE DESCRIPTION: CHANNEL HAS HIGH AND LOW FLOW ALARM SIMULTANEOUSLY. 830320
			CORRECTIVE ACTION: APD PUMP SEIZED. REPLACED PUMP S/N 95024 WITH PUMP 81557. ADJUSTED FLOW. 8303
923616	PD	1	RMS 1R41 APD
			FAILURE DESCRIPTION: APD UNIT SEIZED. 830321
			CORRECTIVE ACTION: REPLACED PUMP S/N 95024 WITH NEW PUMP S/N 81557. 830321

SALEM UNIT 1

OPERATIONS SUMMARY REPORT

AUGUST 1983

Unit No. 1 began the month at 100% power and continued full power operation until the reactor tripped on August 11. Excessive amounts of grass had accumulated at the Circulating Water Screens, causing a rapid loss of five of six circulators. During the rapid load reduction, No. 11 Steam Generator Feedwater Pump tripped on low suction pressure which resulted in a steam flow/feed flow mismatch on No. 13 Steam Generator, causing a reactor trip. Following the trip, when the Group Busses transferred to the Station Power Transformers, a blackout loading of the Vital Busses was initiated by the Second Level Undervoltage Protection.

Subsequent investigation revealed that the initiation of the blackout loading occurred because the large addition of load to the tranformers caused a momentary reduction of the transformer output to 89% of the rated voltage. In accordance with an engineering recommendation, the no load tap settings on all four Station Power transformers have been raised from position 4 to position 5. Also, the balance voltage on the Load Tap Changers (LTC) has been increased. The change in tap positions and LTC balance voltages elevated the voltage of the Station Power Transformers. This elevated voltage provides an additional margin for transients encountered during a fast transfer of load initiated by a unit isolation.

The Circulating water screens were cleared and a unit startup was commenced. Unit No. 1 was returned to full power operation on August 15, and continued full power operation until August 18, when power was reduced to approximately 96%, due to problems encountered with the Electro-Hydraulic Control System (EHC) during turbine valve testing. Investigation revealed that a short in the valve test circuit of No. 13 East Interceptor and Reheat Valve had caused overheating of the EHC circuitry. This, in turn, caused 115VAC to be applied to the -15V logic circuitry causing failure of logic cards.

Unit No. 1 continued to operate at reduced power when the reactor tripped on August 22, during surveillance testing of the Solid State Protection System. During the testing, when the "B" Reactor Trip Breaker was closed, and the "B" Reactor Trip Bypass Breaker was opened, the reactor tripped. Several trip breaker open and close operations had been performed during the testing. Investigation revealed that due to a missing right hand guardrail guide latch, the breaker moved slightly out of its normal position. The misalignment caused the cell switch on the "B" Reactor Trip Breaker to close without the breaker being racked out. Upon opening the bypass breaker, the position of the trip breaker cell switch gave indication to the turbine control system that the "B" Reactor Trip Breaker was racked out with the "B" Bypass Breaker open. Therefore, the turbine control system tripped the turbine as per design. When the turbine actually tripped, reactor power was still greater than permissive setpoint P-7. This caused the Solid State Protection System to trip the reactor.

Due to the problems associated with the "B" Reactor Trip Breaker, an inspection was conducted to determine the condition of the other reactor trip and bypass breakers. On the Unit No. 1 breakers, three of the four right side guardrails were found to have missing rail stops. Functional testing was performed on all the breakers after the repairs were completed. During the subsequent testing the "B" Reactor Trip Breaker failed to close on two occasions. In this case the left side rail stop was found to be the problem. The problem was corrected and all the breakers were tested satisfactorily.

In the interim, because Unit No. 2 had shutdown on August 19, for investigation and repair of a stator cooling water leak, the Unit No. 2 EHC console was placed in Unit No. 1 to allow full power operation of the unit. Unit No. 1 was restored to full power operation on August 26, and continued to operate at full power for the remainder of the month.

COMP	LETED BY:	<u>L.K.</u>		G INFORMATION DOCKET NO.: UNIT NAME: DATE: TELEPHONE: EXTENSION:	50-272 Salem 1 September 10, 1983 609/935-6000 4455		
Mont	h Aug	ust 19	83				
1.	Refuelin	g info	rmation has ch YES <u>X</u>	anged from last m NO	onth:		
2.	Schedule	d date	for next refu	eling: May 31, 1	984		
3.	Schedule	d date	for restart f	ollowing refuelin	g: August 18, 1984		
4.			s be required? YES	NO NO			
			Review Commit YES	ign been reviewed tee? NO <u>X</u> s it scheduled? <u>A</u>			
5.	Schedule	d date	(s) for submit April 1984 (i	ting proposed lic f required)	ensi§ng action:		
6.	Important licensing considerations associated with refueling: NONE						
7.	A) Inc	ore	Assemblies: Fuel Storage		<u>193</u> 212		
8.	Present	licens	ed spent fuel	storage capacity:	1170		
	Future s	pent f	uel storage ca	pacity:	1170		
9.		fuel	pool assuming	can be discharged the present	September 1996		
8-1-	7.R4						



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

Salem Generating Station

September 10, 1983

Director, Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, DC 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 August 1983 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,

prographo of

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

IE24

95-2189 (2.5M) 6-83

LKM:sbh

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 Page 1 of 17 8-1-7.R4

The Energy People