Omaha Public Power District
1623 Harney Omaha, Nebraska 68102-2247
402/536-4000

October 13, 1989
LIC-89-915

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: September Monthly Operating Report

Pursuant to Technical Specification Section 5.9.1, and 10 CFR Part 50.4(b)(1), please find enclosed one copy of the September 1989 Monthly Operating Report for the Fort Calhoun Station Unit No. 1.

If you should have any questions, please contact us.

Sincerely,

K. J. Morris
Division Manager
Nuclear Operations

KJM/pjc

c: R. D. Martin, NRC Regional Administrator
P. H. Harrell, NRC Senior Resident Inspector
Office of Management & Program Analysis (2)
R. M. Caruso - Combustion Engineering
R. J. Simon - Westinghouse
Nuclear Safety Analysis Center
INPO Records Center
American Nuclear Insurers

IE24
1/1

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-285
UNIT	Fort Calhoun Station
DATE	October 13, 1989
COMPLETED BY	D. L. Stice
TELEPHONE	(402)636-2474

MONTH September 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	452	17	304
2	453	18	304
3	455	19	303
4	456	20	302
5	456	21	303
6	455	22	303
7	455	23	305
8	456	24	180
9	456	25	0
10	460	26	0
11	461	27	0
12	461	28	0
13	421	29	65
14	305	30	111
15	305		
16	304		

INSTRUCTIONS

On this form, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

OPERATING DATA REPORT

DOCKET NO. 50-285
UNIT Fort Calhoun Station
DATE October 13, 1989
COMPLETED BY D. L. Stice
TELEPHONE (402)636-2474

OPERATING STATUS

1. Unit Name: Fort Calhoun Station — Notes
2. Reporting Period: September 1989
3. Licensed Thermal Power (MWt): 1500
4. Nameplate Rating (Gross MWe): 502
5. Design Electrical Rating (Net MWe): 478
6. Maximum Dependable Capacity (Gross MWe): 502
7. Maximum Dependable Capacity (Net MWe): 478
8. If changes occur in Capacity Ratings (Item Numbers 3 through 7) Since Last Repor Give Reasons:
   N/A
9. Power Level to Which Restricted, If Any (Net MWe): N/A
10. Reasons for Restrictions, If Any: N/A

		This Month	Yr-to-Date	Cumulative
11.	Hours in Reporting Period	720.0	5,807.0	139,65
12.	Number of Hours Reactor was Critical	618.7	4,863.5	108,21
13.	Reactor Reserve Shutdown Hours	0.0	0.0	1,30
14.	Hours Generator On-Line	609.8	4,637.1	107,05
15.	Unit Reserve Shutdown Hours	0.0	0.0	
16.	Gross Thermal Energy Generated (MWH)	748,608.2	6,376,662.0	139,265,65
17.	Gross Electrical Energy Generated (MWH)	236,692.0	2,056,336.0	45,800,46
18.	Net Electrical Energy Generated (MWH)	222,992.0	1,953,461.9	43,724,96
19.	Unit Service Factor	84.7	79.9	76.7
20.	Unit Availability Factor	84.7	79.9	76.7
21.	Unit Capacity Factor (Using MDC Net)	64.8	70.4	67.7
22.	Unit Capacity Factor (Using DER Net)	64.8	70.4	66.0
23.	Unit Forced Outage Rate	15.3	5.8	3.0

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
    Refueling Outage estimated to begin on February 17, 1990, with a planned duration of 86 - 118 days.
25. If Shut Down at End of Report Period, Estimated Date of Startup: N/A
26. Units In Test Status (Prior to Commercial Operation): Forcast Achieved

INITIAL CRITICALITY			
INITIAL ELECTRICITY	N/A		
COMMERCIAL OPERATION			

Refueling Information
Fort Calhoun - Unit No. 1

Report for the month ending September 1989

1. Scheduled date for next refueling shutdown. — February 1990

2. Scheduled date for restart following refueling. — May 1990

3. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? — Yes

   a. If answer is yes, what, in general, will these be?

      - Incorporate specific requirements resulting from reload safety analysis

   b. If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload.

   c. If no such review has taken place, when is it scheduled?

4. Scheduled date(s) for submitting proposed licensing action and support information. — January 1990

5. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures. — None Planned

6. The number of fuel assemblies:

a) in the core	133	assemblies
b) in the spent fuel pool	437	"
c) spent fuel pool storage capacity	729	"
d) planned spent fuel pool storage capacity	May be increased via fuel pin consolidation or dry cask storage	

7. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity. — 1994*

*Full core offload of 133 assemblies lost.

Prepared by Ken Hoett — Date October 10, 1989

DOCKET NO. 50-285
UNIT NAME Fort Calhoun Station
DATE October 13, 1989
COMPLETED BY D. L. Stice
TELEPHONE (402) 636-2474

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH September 1989

No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	System Code (4)	Component Code (5)	Cause & Corrective Action to Prevent Recurrence
3	890913		0		4				Reduced power due to delta-T power anomaly.
4	890924	F	110	A	1				Shutdown due to suspected problem with RC-3A upper thrust bearing. Problem found to be failed RTD wiring. RTD and wiring replaced.

1 2 3 4

F-Forced
S-Scheduled

Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administative
G-Operational Error
H-Other (Explain)

Method:
1-Manual
2-Manual Scram
3-Automatic Scram
4-Other (Explain)

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

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Exhibit 1 - Same Source

OMAHA PUBLIC POWER DISTRICT
Fort Calhoun Station Unit No. 1

September 1989
Monthly Operations Report

I. OPERATIONS SUMMARY

Fort Calhoun Station operated at a nominal 100% power until September 13, 1989, when an anomaly involving the Reactor Protective System (RPS) occurred. The delta-temperature (delta-T) power indication on two RPS channels deviated low by approximately 4% and two channels deviated high by approximately 2%. Other abnormal indications were a 2°F drop in the delta-T recorder feeding the reactor regulating system and an approximate 2% drop in power input to Reactor Coolant Pump (RCP) RC-3B. Nuclear power and delta-T power are auctioneered for the highest power input to the RPS. The two RPS channels that deviated low were declared inoperable since the deviation was in the non-conservative direction. A power reduction to 70% was initiated per Technical Specifications. The anomaly corrected to normal indications when reactor power reached 76%. Power is to remain under 70% until sufficient justification for the cause of the anomaly is formulated and there is reasonable certainty that there are no safety concerns restricting a return to 100% power. Delta-T power is not used in the safety analysis. At all times during this event the nuclear power and all other plant indications remained normal and constant. The most likely cause of the event is thermal stratification of the flow in the hotleg of the reactor coolant system. This anomaly has occurred at several other Combustion Engineering plants after having gone to a low neutron leakage core design. This core design produces a higher temperature gradient across the core.

On September 24, 1989, the upper thrust bearing temperature indication for RCP motor RC-3A was observed trending up and above the specified operating limit. A rapid shutdown of the plant was initiated from 69% power. At about 8% power the temperature indication on the bearing spiked up. The reactor was manually tripped and RC-3A was secured. A plant cooldown was initiated to facilitate repair of the thrust bearing. Investigations during the plant shutdown indicated the thrust bearing was not damaged but the wiring from the Resistance Temperature Detector (RTD) was found to have cuts in the insulation. The RTD and wiring were replaced. Fort Calhoun Station returned critical September 28 and held at 10% power for vibration monitoring of the reactor vessel thermal shield. The generator was online September 29 and back to 69% power October 1, 1989.

The Raw Water/Component Cooling water heat exchangers have been experiencing flow restrictions due to deposits of sand settling in heat exchanger end bells. More passive methods of removing the sand have not proved satisfactory so heat exchanger AC-1B was opened up and cleaned out.

During ISI testing, data showed that Raw Water Pump AC-10C was in the required range for corrective action. The pump shaft lift was adjusted but the pump still did not meet design requirements. AC-10C was removed and rebuilt.

The post-maintenance testing showed pump AC-10C was operable and by calculation is capable of design flow rates. However, since the margin above minimum acceptable performance is not large, an administrative control has been applied to enter a more restrictive Technical Specification Limited Condition for Operation (LCO). If Raw Water Pump AC-10A becomes inoperable, AC-10C will also be declared inoperable. Both AC-10A and AC-10C are fed by the same Emergency Diesel Generator.

Modification work continues on the Control Room HVAC, Instrument Air Dryer, and Security System.

Construction continues on the Chemistry/Radiation Protection and Radiation Waste Buildings. Site preparation has begun for the Administration Building.

The following NRC inspections took place in September:

IR 89-33 Resident Inspectors' Monthly Inspection
IR 89-34 Follow Up to Generic Letter 88-17 Loss of Decay Heat Removal
IR 89-36 Operating Procedures
IR 89-39 Follow Up to Raw Water System Operability Concerns

The following LERs were submitted.		Date Submitted
89-S07	Failure to Maintain Compensatory Measures - Inattentive Security Officer	September 21, 1989
89-S08	Failure to Maintain Compensatory Actions	September 20, 1989
89-14R1	Auxiliary Feedwater Panel Outside Design Basis	September 29, 1989

A. PERFORMANCE CHARACTERISTICS

None.

B. CHANGES IN OPERATING METHODS

None.

C. RESULTS OF SURVEILLANCE TESTS AND INSPECTIONS

None.

D. CHANGES, TESTS AND EXPERIMENTS CARRIED OUT WITHOUT COMMISSION APPROVAL

System Acceptance Committee Packages for September 1989:

Package	Description/Analysis

None

E. RESULTS OF LEAK RATE TESTS

The Reactor Coolant System Leak Rate Test, ST-RLT-3 F.1, indicates for the month of September a continuation of the elevated total leak rate seen throughout Cycle 12.

On September 24, the plant was placed in hot shutdown to repair a problem with RC-3A-M's upper thrust bearing temperature indication. Within a couple of hours of achieving hot shutdown, the RCS System Engineer was in containment measuring all of the valve leak-off temperatures, RCP vapor seal leak-off temperatures, RC loop drain line temperatures, and the temperature of the equipment drain header just upstream of the Reactor Coolant Drain Tank (RCDT) loop seal. No appreciable leakage was found visually or through leak-off temperature measurements. There was, however, evidence of RC leakage into the RCDT. The temperature measured at the bottom of the Equipment Drain Header (EDH) just before the loop seal was 155°F. The source of this possible leakage was not found.

The plant was placed back in service on September 29. The heat-ups, cooldowns, and other plant maneuvering during this mini-outage, skewed the leak rate test results. Overall, no RCS leakage tests performed during the month of September appeared unusual for the Cycle of operation or for the particular plant conditions.

F. CHANGES IN PLANT OPERATING STAFF

Two Operators were hired during the month of September 1989.

G. TRAINING

During the month of September, three licensed operator applications were submitted to the NRC for an October examination. Plans for a second Reactor Operator program beginning in October were developed. As a result of discussions held, six individuals were identified to enter the program beginning October 2, 1989. Reactor Operator students from the first class continued training and will begin on-the-job training (OJT) October 2, 1989 and continue through

January 15, 1990. Senior Reactor Operator (SRO) candidates completed preparations and practice walk through examinations for the October 2, 1989 NRC examination.

A meeting between OPPD, Westinghouse and Interfacts was held to establish criteria on the formal factory acceptance test, simulator shipment from Pittsburgh to Omaha, and the estimated shipment date of Fort Calhoun's new simulator. The current estimate is that the formal factory acceptance test will begin the week of October 23, 1989. Normal operations testing of the simulator continued and it has been determined this testing will not be "official" testing due to the number of deficiencies identified. The Abnormal Operating Procedures (AOPs) are 52% complete and on schedule toward meeting the November commitment. Shift Technical Advisor candidates took part in simulator training, OJT, and completed their comprehensive examination and Oral Boards. General Employee training, as well as System Engineer, Technical Staff and Quality Assurance training, continued as scheduled. Maintenance training was conducted as scheduled for September. A semiannual maintenance training and plant maintenance conference was held on September 21, 1989. Chemistry/Radiation Protection initial training also continued as scheduled during the month of September. The NRRPT exam preparatory class started on September 25, 1989.

H. CHANGES, TESTS AND EXPERIMENTS REQUIRING NUCLEAR REGULATORY COMMISSION AUTHORIZATION PURSUANT TO 10CFR50.59

Amendment No.	Description
None	

II. MAINTENANCE (Significant Safety Related)

See attached printout.

G. R. Peterson
Manager-Fort Calhoun Station

MWO # SYSTEM
EQUIP ID

WORK DESCRIPTION

894470 EE-5

REPLACE EXISTING 480V BKR.JEV 9-18-89 WITH ANEW AK-2A-25-1 BREAKER FROM STORES.SET UP THE NEW BRGCSER WITH 250 AMP.,EC-2A TRIP DEVICES, WITH 18-3 TRIP CURVE.OLD BREAKER WILL BE SENT TO G.E. FOR INSPECTION ,AND REFURBISHMENT TO CURRENT DESIGN SPECIFICATION. GARY WOOD/JEV

1B4B-8

WORK PERFORMED

CQE: Y CLASS: N

REMOVED 3 EC-1 175 AMP TRIP DEVICES FROM SPAR BREAKER. INSTALLED 3 NEW EC-2A 250AMP 18-3 TROP DEVICES. REMOVED SPARE SECONDARY DISCONNECT FROM BREAKER PERFORMED PM-EE-3.2 & CP-Dw- 468 BKR. ON SPARE BREAKER.
REMOVED EXISTING BREAKER FROM CUBICLE 1B4B-8, INSTALLED SPARE BREAKER AND COMPLETED CP-Dw-468 BKR CONTROL CHECK. BREAKER REMOVED FROM FROM 1B4B-8 WILL BE SENT OUT FOR REPAIRS UNDER USED PMEE3.2 AS GUIDLINE.

COMPLETE 09/21/89

WORK DESCRIPTION

894694 AE

OUTER PAL DOOR FAILED LEAK TEST,FLUFF SEAL.

AE-2

WORK PERFORMED

CQE: Y CLASS: 2

FLUFFED OUTER PAL DOOR SEAL.

COMPLETE 09/22/89

CLOSED CQE MWO'S COMPLE ED DURING SEPTEMBER

MWO #	SYSTEM EQUIP ID

TOTAL RECORDS SELECTED: 2

MWO # / EQUIP ID	SYSTEM		LEAD DISC	PRINT STATUS
875812	AC-RW	WORK DESCRIPTION VALVE IS EXTREMELY HARD TO OPERATE &VALVE LEAKS PAST THE SEAT. GRIND OUT EXISTING VALVE & WELD IN NEW VALVE.	PE	C
RW-131				
CQE: Y CLASS: 3		WORK PERFORMED REPACKED NEW CQE 1" VALVE IN SHOP WITH GRAFOIL PACKING SET. CRANE9/28/69 STUFFING BOX DEPTH WAS 1 1/8".		
COMPLETE: 09/29/89				
881880	AC-RW	WORK DESCRIPTION HCV-2861, LIMIT SWITCH, GREEN LIGHT NOT INDICATED WITH VALVE CLOSED. (REPLACES MO #864739)	EM	C
HCV-2861				
CQE: Y CLASS: 3		WORK PERFORMED NONE		
COMPLETE: 09/12/89				
885988	EE	WORK DESCRIPTION CELLS 5 & 6 OF BATTERY NO. 1 HAVE LOW(2.14 VDC/CELL) VOLTAGES. NEED TO DETERMINE CAUSE. T.S. 2.7	EM	C
EE-8A				
CQE: Y CLASS: SR		WORK PERFORMED MEASURED CELLS 5 & 6 OF BATT. # 1 AND FOUND VOLTAGE TO BE 2.14 VDC FOR EACH CELL. ACCORDING TO THE ATTACHEDTELEPHONE CONVERSATION WITH EXIDE REPRESENTATIVE THE VOLTAGES ARE ACCEPTABLE. 4-18-89 R NIELSEN. CELLS FOR 5 & 6 READ 2.14 VOLTS ON 4-20-89 GFB CELL TEMP OF 5 & 6 WERE BOTH 78F GFB SEE ATTACHED DATA SHEET.		
COMPLETE: 09/09/89				
886648	EE	WORK DESCRIPTION VISUAL INSPECTION AND CLEANUP OF DRYCHEM. DISCHARGED DUE TO FIRE IN DG-1 SEE DAN JOHNSON FOR INSP. CRITERIA AND WORK INSTRUCTIONS.	EM	C
EE				
CQE: Y CLASS: Y		WORK PERFORMED INSPECTION OF ROOM BETWEEN DG ROOMS AND SWITCHGEAR ROOM SHOWED NO SIGNS OF DRY CHENICAL. ROOM 63 NEEDS TO INSPECTED CS 12-14-88. ROOM 63 INJECTE D & CLEANED HAD QC INSPECT ALL AREAS.		
COMPLETE: 09/12/89				

MWO # / EQUIP ID	SYSTEM		LEAD DISC	PRINT STATUS
886680	AI-NI	WORK DESCRIPTION DETERMINE OPERABILITY OF "D" WIDE RANGE, SUGGEST DOING INTEGRAL BIAS CURVE.	IC	C
AI-NI				
CQE: Y CLASS: SR		WORK PERFORMED "D" WIDE FLANGE IS INOP. PROPER COUNTS AT PREAMP PER CP, NO COUNTS IN CONTROL ROOM TEST. FUNCTION DOES NOT WORK. MO 886796 INTIATED CP COULD NOT BE DONE BECAUSE WAS INOP.		
COMPLETE: 09/09/89				
889137	FW--FW	WORK DESCRIPTION INSTALL FLANGE WITH NIPPLE DOWNSTREAM OF FW-1456. SEE TIM DUKARSKI FOR DETAILS. TECH.SPEC.2.5	PE	C
FW-1456				
CQE: Y CLASS: 3		WORK PERFORMED FABRICATED A 1/2"X11 5/8"OD BLIND FLANGE. ADDED A 1 1/2" FIRE HOSE CONNECTION. MADE A 1/8" FULL FACE RED RUBBER GASKET TO FIT. PAINTED WHITE WITH A RED EOP-20 ON IT. REG 9/27/89 MATERIALS RECEIVED FROM BILL STECKER		
COMPLETE: 09/29/89				
889348	CA	WORK DESCRIPTION CONDUIT FOR HCV-1749 PULLED OUT OF CONNECTION POINT,FOUND DURING NRC RESIDENT INSPECTION.	EM	C
HCV-1749				
CQE: Y CLASS: 2		WORK PERFORMED INSPECTED WIRE & SEAL TIGHT PER D.W.I. WIRE OK. RE-FITTED SEAL TIGHT FITTING & TIGHTENED TO CONNECTOR. INSPECTED BY QC K.D. 9-12-89.		
COMPLETE: 09/12/89				
889370	AC-CCW	WORK DESCRIPTION THE CONDUIT LEADING TO JB91A (HCV-401A) IS LOOSE.	EM	C
HCV-401A				
CQE: Y CLASS: 2		WORK PERFORMED RE-FITTED SEAL TIGHT FITTINGS & TIGHTENED TO CONNECTOR.		
COMPLETE: 09/12/89				

MWO # / EQUIP ID		LEAD DISC	PRINT STATUS
890777 RC C/TE-112C	WORK DESCRIPTION C/112C TEMPERATURE INDICATION DROPPING OUT AT RPS CHANNEL "C" AND METER ON CB-3. DEF TAG #881267 TECH SPEC 2.15 WORK PERFORMED TIGHTENED CONNECTIONS AT POTHEAD VERIFIED THAT CABLES DID NOT GROUND OUT AT POT HEAD. TEMP. READS 540.6 @ TE-112C / TE122C READS 540.8, NO CALBIR ATION OF LOOP REQUIRED. RPS READS C540.9, 9-17-89. LOOP HAS NOT DROPPED OUT.	IC	C
CQE: Y CLASS: SR COMPLETE: 09/18/89			
892285 CH PCS-224	WORK DESCRIPTION PRESSURE SWITCH FOR LUBE OIL APPEARS TO BE WIRED WRONG. SEE RIGH CONNERS FOR DETAILS WORK PERFORMED INVESTIGATED WIRING AND FOUND TO BE WIRED IN ACCORDANCE WITH DRAWING 161F561 SHEET 4	EM	C
CQE: Y CLASS: SR COMPLETE: 09/06/89			
892315 EE MCC-3C2-D02	WORK DESCRIPTION CONTROL INDICATING PANEL AT MCC IS NO MOUNTED CORRECTLY AND WIRING IS EXPOSED. T.S.2.2 WORK PERFORMED INSPECTED CUBICLE AND CUBICLE DOOR AND BOUND TO BE OK. BREAKER WAS IN CUBICLE FRIMLY AND COULD NOT BE REP OSITIONED	EM	C
CQE: Y CLASS: SR COMPLETE: 09/01/89			
892319 EE MCC-3A2-C04	WORK DESCRIPTION NEED TO INSTALL COVER ON VACATED CUBICLE C04 IN MCC-3A2 TO PREVENT DEBRIS FROM ENTERING MCC. WORK PERFORMED INSTALLED 2 SETS OF 4SQ BLANKS OVER EXISTING HOLES IN CUBILE COVER. AND FASTENED WITH 2-3/4" X 1/4 BOLTS AND NUTS	EM	C
CQE: Y CLASS: SR COMPLETE: 09/01/89			

MWO # / EQUIP ID	SYSTEM		LEAD DISC	PRINT STATUS
		WORK DESCRIPTION		
892757	FW-CD	VALVE STEM SHEARED OFF DUE TO THROTTLING OF VALVE.	PE	C
FW-663		DEF. TAG 00395		
		WORK PERFORMED		
CQE: Y CLASS: 3		NEED FFWST DRAINED PRIOR TO START). REMOVED BONNET-REMOVED STEM AND REP LACED WITH NEW STEM & DISC REPACKED INSTALLED BONNET & NEW GASKET NEEDS PACKING GLANDS.		
COMPLETE: 09/26/89				
		WORK DESCRIPTION		
892957	DG	LUBE OIL EXPANSION TANK HAS LEAKING UNIONS ON TOP OF TANK	PE	C
DG				
		WORK PERFORMED		
CQE: Y CLASS: SR		DG-2, BRAZED COUPLING ON DRUM AFTER REMOVING PLASTIC INSERT THREADS BECA USE THEY WERE BROKEN. DISCONNECTED VENT PIPING,HAD NO OBSTRUCTION HAD QC CLOSE OUT. D-G-1 TIGHTEN LOOSE FITTINGS ON VENT LINE AND HAD QC CLOSE O		
COMPLETE: 09/26/89		UT.		
		WORK DESCRIPTION		
893448	CH	REPAIR OR REPLACE VALVE AS NEEDED.THIS MWO WILL VOID M.O.874005. VALVE IS IN ROOM 7 AND IS A WELDED END VALVE.	PE	C
CH-371				
		WORK PERFORMED		
CQE: Y CLASS: 1		DISASSEMBLED VALVES.CLEANED & LAPPED SEAT WITH 220 GRIT CLOVER COMPOUND THEN FINSISHED WITH 600 GRIT CLOVER COMPOUNT REPACKED & REASSEMBLED WITH NEVER SEIZE ON THREADS. CLEANLINESS LEVEL C FOUND INSIDE VALVE AROUND T		
COMPLETE: 09/01/89		HE SEATING SURFACE,LEVEL B RESTORED.		
		WORK DESCRIPTION		
893648	CH	CH-400 IS AN EQUALIZATION VALVE.IT OPERATES HARD,NEEDS TO BE DISASSEMBLE AND CLEANED.LUBRICATE AS NEEDED.	PE	C
CH-400				
		WORK PERFORMED		
CQE: Y CLASS: 1		LUBRICATED VALVED STEM, AND MANUALLY OPERATED THE VALVE FROM FULLY OPENE D TO FULLY CLOSED SEVERAL TIMES TO PROVE GOOD OPERABILITY BONNET REMOVAL AND VALVE REPACK WAS NOT REQUIRED TO REPAIR VALVE TO OPERABLE STATUS.		
COMPLETE: 09/01/89				

MWO # / EQUIP ID	SYSTEM		LEAD DISC	PRINT STATUS
893684	CH	WORK DESCRIPTION CH-183 HAS WATER LEAKING FROM TOP CAP, REPAIR VALVE BELLOWS LEAKAGE.	PE	C
CH-183		WORK PERFORMED REPLACED CAP GASKET VALVE LEAKS OUT BETWEEN STEM AND ADJUSTMENT SCREW JC 082889. REMOVED VALVE FROM SYSTEM DISASSEMBLED AND REPLACED GASKETS AND BELLOWS PUT VALVE BACK TOGETHER AND TESTED THE VALVE PASSED ALL TESTS.		
CQE: Y CLASS: 1				
COMPLETE: 09/12/89				
893776	CH	WORK DESCRIPTION EXCESSIVE PACKING LEAK,REPACK PLUNGER PACKING.	MM	C
CH-1A		WORK PERFORMED REPACKED PUMP AND REPLACED PLUNGERS. PER INSTRUCTIONS. PER MP-CH-1		
CQE: Y CLASS: 1				
COMPLETE: 09/12/89				
893882	CH	WORK DESCRIPTION ADD OIL AS NEEDED TO CHARGING PUMPS, CRANK CASE, AND GEAR BOX ON CH-1A, B, AND C DURING THE MONTH OF AUGUST.	MM	C
CH-1A		WORK PERFORMED NO WORK DONE USING THIS MO DURING AUGUST.		
CQE: Y CLASS: N				
COMPLETE: 09/05/89				
893894	SI-HP	WORK DESCRIPTION I&C TO RESET AND REPAIR HCV-2987 BOOSTER IF NEEDED FOR THE MONTH OF AUGUST. BOOSTER IS NON-CQE T.S.2.3	IC	C
SI-HP		WORK PERFORMED RESET INTENSIFIER. L POWELL 8-8-89-1607/RESET INTENSIFIER 8-25-89 FOUND AT320 LEFT 350 A GREEN/WALT NENEMAN RESET INTENSIFIER 8-029-89 FOUND AT 315 LEFT AT 350 P DOMNINA/DALE PIKE.		
CQE: Y CLASS: 1				
COMPLETE: 09/01/89		*FOUND AT 320, LEFT AT 350 L POWELL 9-8-89		

MWO # / EQUIP ID	SYSTEM		LEAD DISC	PRINT STATUS
		WORK DESCRIPTION		
893897	SI	ALL S.I. TANK REFERENCE LEGS NEED TO BE FILLED FOR THE MONTH OF AUGUST	IC	C
SI				
		WORK PERFORMED		
CQE: Y CLASS: 1		8-31-89 1015 FILLED S1-6D, BEFORE W-73, N-71.4 AFTER W-70.5 NO 70.2 JM		
COMPLETE: 09/01/89				
		WORK DESCRIPTION		
893997	AI	REPAIR PRINTHEAD ON TAR THREE (3) RECORDER, PRESENTLY DRAWING A STRAIGHT LINE.	IC	C
TAR-3				
		WORK PERFORMED		
CQE: Y CLASS: N		INSPECTED TAR-3,NO STRAIGHT LINE BEING DRAWN 8-17-89. COULD NOT DUPLICAT E ORGINAL PROBLEM. NO REPAIRS REQUIRED,NO CP PERFORMED.		
COMPLETE: 09/09/89				
		WORK DESCRIPTION		
894083	RC	OPERATIONS IS EXPERIENCING TO MUCH RIPPLE ON TEMPERATURE INDICATION OF THE RCS WIDE RANGE LOOP, POSSIBLY POWER SUPPLY PROBLEM.	IC	5
TT-113				
		WORK PERFORMED		
CQE: Y CLASS: S		ON HOLD AWAITING DWI FROM ENGINEER DID WORK PER DETAILED WORK INSTRUCTIO N AND CP-113/115 (ATTACHED) REPALCED 20 MFDAT 100 VDC CAPACITOR IN LOOP POWER SUPPLY.BENCH TESTED AT RATED C URRENT AND REINSTALLED.DURING POST		
COMPLETE: 09/25/89		MAINT TESTING IT WAS REQUIRED TO DECAL UR-113/115 BECAUSE LOOP TEST FALL ED,RETEST OK.		
		WORK DESCRIPTION		
894355	EE-8A	AT AMMETER A1, WIRE # 80 IS LIFTED FROM PB1 TO AMMETER FOR NO APPARENT R EASON. SUGGEST ATTACHMENT OF WIRING AS PER SOLIDSTATE DRW # 2C6288. LPH	EM	C
EE-8F		(9681) FOR G. WOOD (6877) @ 1313 08/24/89		
		WORK PERFORMED		
CQE: Y CLASS: N		RELANDED WIRE PER WORK INSTRUCTIONS AND DRAWINGS		
COMPLETE: 09/21/89				

MWO # / EQUIP ID	SYSTEM	WORK DESCRIPTION / WORK PERFORMED	LEAD DISC	PRINT STATUS
894357 EE-8G	EE-8A	WORK DESCRIPTION AT AMMETER A1, WIRE #80 IS LIFTED FROM PB1 TO AMMETER FOR NO APPARENT RE ASON. SUGGEST THAT WIRING BE RETERMINATED AS PER SOILDSTATE DRW # 2C6289 LPH (6681) FOR G. WOOD (6877) @ 1337 08/24/89 MWR #0002566 WORK PERFORMED LANDED WIRE PER WORK INSTRUCTIONS	EM	C
CQE: Y CLASS: N COMPLETE: 09/21/89				
894387 AC-10C	AC-RW	WORK DESCRIPTION PUMP PERFORMANCE DOES NOT MEET AN ADEQUATE MARGIN ABOVE REQUIRED LEAK RA TES.(PER SURVAILANCE TEST).REMOVE AND REPLACE AC-10C PUMP. WORK PERFORMED REMOVED PUMP ON 9-15-89 AND REPLACED WITH REBUILT SPARE PER MP-AC-10(9-1 5/9-16) PUMP FAILED ST-RW-2 AND MWO 897565 WAS INITIATED TO REBUILD PUMP REBUILT PUMP USING NEW PARTS AS LISTED ON MWO 897565. REMOVED PUMP AND R EINSTALLED AFTER REPAIR USING MP-AC-10(9-18-89)	MM	C
CQE: Y CLASS: 3 COMPLETE: 09/21/89				
893408 PCV-103-2	RC	WORK DESCRIPTION OPERATIONS REPORTS PRESSURIZER SPRAY VALVE ALARM PCV-103-2 (A-4 E2) SEAL LEAKAGE ALARM CAME IN AT 050MPBN08/27/89. VALVE WAS CLOSED AND ALARM CLEARED AT 1832 08/27/89, INVESTIGATE FOR POSSIBLE PROBLEMS. ALSO CHECK PCV-103-1 FOR PROPER PACKING ADJUSTMENT. WORK PERFORMED TIGHTENED PCV-103-2 PACKING NUTS TO 45FT LBS WHICH REQUIRED APROX. 1/8 TURN EACH. PACKING NOT SEIZING, IS 7/8 HEX NUT. NON-RATCHET TYPE 3/8" TORQUE WRENCH WOULD WORK BEST WITH A 3/8 DRIVE DEEP WELL SOCKET. PCV-103 -1 WAS CHECKED AND FOUND TO BE FAIRLY SNUG 35 TO 45FT LBS	PE	C
CQE: Y CLASS: 1 COMPLETE: 09/01/89				
894581 AC-10C	AC-RW	WORK DESCRIPTION AC-10C FAILED ISI TEST,ADJUST PUMP IMPELLER LIFT.	MM	C
CQE: Y CLASS: 3 COMPLETE: 09/14/89		WORK PERFORMED TAGGED OUT PUMP AND ADJUSTED LIFT PER MP-AC-10-AND PLANNERS, INSTRUCTION S. PUMP AS FOUND HAD.125" LIFT, CHECKED TOTAL LIFT AND FOUND TO BE .650 RESET LIFT TO .012		

MWO # / EQUIP ID	SYSTEM	WORK DESCRIPTION / WORK PERFORMED	LEAD DISC	PRINT STATUS
894634	AI	THE GROUND INDICATING LIGHT ON AI-41B NEGATIVE BUS INDICATES A GROUND.NE ED TO TROUBLESHOOT TO DETERMINE WHERE THE GROUND IS. D. ROVAR/JEV	EM	C
AI-41B				
CQE: Y CLASS: N		+ TO GROUND 95VDC, NEG TO GROUND 35VDC. FOUND DC GROUND IN #2 BATTERY CHARGER. MWO WRITTEN. MWO 894782 WAS WRITTEN TO REPAIR BC#2		
COMPLETE: 09/29/89				
894682	RM	INVESTIGATE PROBLEMS ASSOCIATED WITH CALIBRATION DOCUMENTATION OF RM-060.	IC	3
RM-060				
CQE: Y CLASS: S		JUMPED OUT ANALIZER BOARD. MOVED DETECTOR GEOMETRY AWAY FROM SERVICE UNT IL WE GOT GROSS COUNTS 1E6 WITH BA 133 #345. THE TOOK A SOURCE SET READI NG SEE ATTCHED. THIS PROVED THAT BY BACKING OF ON THE DETECTOR WE WERE A BLE TO REDUCE OR ELIMINATE THE SATURATIONOF THE PM TUBE PERFORMED CP-060 APPLICABLE SECTION ON SECONDARY CAL. ALL INTO WAS GOOD 9-21-89.		
COMPLETE: 09/21/89				
894686	AC-RW	REMOVE VALVE FROM SYSTEM BY GRINDINGOUT THE SOCKET WELDS. DISASSEMBLE, INSPECT, RE-ASSEMBLE AND TEST RELIEFVALVE PER MP-RV-1, RE-INSTALL VALVE IN THE SYSTEM BY WELDING THE SOCKET WELDS FOR THE INLET AND OUTLET.	PE	3
RW-222				
CQE: Y CLASS: 3		RELAPPED VALVE SEAT & DISC. HAD THE NOZZLE MACHINED REPALCED THE GASKETS . VALVE WAS FULL OF SAND. WELDED RELIEF VALVE RW-222 BACK IN PLACE R. WO MBLE 9-29-89.		
COMPLETE: 09/29/89				
894716	AC-RW	REPLACE THE VALVE BY WELDING IN A REPLACEMENT SOCKET WELDED GATE VALVE. THE ORIGINAL VALVE WAS REMOVED ON MWO #893850 DUE TO THE VALVE BEING OBSTRUCTED.	PE	C
RW-169				
CQE: Y CLASS: 3		REPLACE VALVE RW-169- R WOMBLE 9-29-89 REPACKED NEW VALVE WITH GRAFOIL PACKING PRIOR TO INSTALLATION.		
COMPLETE: 09/29/89				

MWO # / EQUIP ID	SYSTEM		LEAD DISC	PRINT STATUS
		WORK DESCRIPTION		
894739	AI	PLEASE REPAIR TAR-3 RECORDER SLIDEWIRE/AND OR SERVO MOTOR.	IC	3
TAR-3				
		WORK PERFORMED		
CQE: Y	CLASS: S	REPLACED SLIDE.WIRE.PERFORMED CALIBRATION 9-27-89. REPALCED SERUD MOTOR, PERFORMED CAL CP-TAR-3 9-28-89.		
COMPLETE: 09/28/89				
		WORK DESCRIPTION		
894742	RC	TECHNICIAN REMOVING TQ-113 FROM PANEL, RECEIVED A SPURIOUS PRE-TRIP ALARM ON TMLP ON "C" CHANNEL AND POSSIBLY 1/2 TRIP ON PPLS. CHECK	IC	C
C/PQ-102		FOR LOOSE FUSE HOLDER ON ADJACENT POWER SUPPLY TO C/PQ-102 FOR POSSIBLE PROBLEMS AS REPORTED BY DICK CAMPBELL, I/C SHOP.		
		WORK PERFORMED		
CQE: Y	CLASS: S	CHECKED BLOCK CONTACTS IN BLOCK CIRCUIT FIRST THEN FOUND FUSE HOLDER EAR S LOOSE. IN C/PQ-10Z PULLED FUSE AND TIGHTENED EARS REINSERTED, CHECKS O K		
COMPLETE: 09/26/89				
		WORK DESCRIPTION		
894764	VA	NEED TO INSTALL 90 DEGREE ELBOW EXTENTIONS TO 4 INCH DRAINLINES.THESE	PE	C
VA-6A AND 6B		DRAINLINES ARE TELLTALE LINES FROM FAN HOUSINGS 6A AND 6B IN CONTAINMENT.		
		WORK PERFORMED		
CQE: Y	CLASS: 1	TM-89-M-044 ELBOW IS NOT,NOR IS IT REQUIRED TO BE CQE WORK AUTHORIZED P ER TEMP MOD. KJ DUNHAM SYS-ENGNR 9-29-89. FABRICATED TWO 4 OF 4 PVC PIPE CUT LONGITUDINAL TO FORM THROUGH. INSTALLED WITH TWO HOSE CLAMPS AS PER		
COMPLETE: 09/27/89		TEMP MOD #89-M-044.		
		WORK DESCRIPTION		
894782	EE-8A	THE BATTERY CHARGER IS CAUSING A GROUND ON DC BUS #2. NEED TO TROUBLESHO OT TO IDENTIFY PROBLEM,AND MAKE REPAIRS AS REQUIRED TO RESTORE NORMAL OP	EM	C
EE-8D		ERATION. J.FOLEY/JEV		
		WORK PERFORMED		
CQE: Y	CLASS: N	TROUBLE SHOOT AND SUSPECT D-7 DIODE BAP VZ50PA40C VARISTOR TROUBLE SHOT FOUND CABLE GOINT AMP METER IN CONTROL RM THEN COMPUTER GROUNDED GFS 9-2 8-89 RN. TRACED GROUND TO AI 208 B SIGNAL CONDITIONER CARD 701-2 AND CHA		
COMPLETE: 09/29/89		RGER #2 DN BUS WITH NO GROUNDS. RN/GFB 9-29-89 I&C MWR 3720 WRITTEN TO CLEAN GROUNDS IN AI 2088-701-2		

MWO # / EQUIP ID	SYSTEM	WORK DESCRIPTION / WORK PERFORMED	LEAD DISC	PRINT STATUS
894794	AC-RW	PERFORM A HYDROSTATIC TEST OF FOUR (4) VALVES RECIEVED ON PURCHACE ORDER #S 049580 TO SATISFY THE COMMERCIAL GRADE DEDICATION REQUIREMENT OF THE MATERIAL EVALUATION REPORT (MER) FORRW-152 AND RW-169.	PE	C
HANCOCK 3/4 950 GLB.				
CQE: Y CLASS: N		PERFORMED A HYDROSTATIC TEST ON FOUR VALVES LABELED 1,2,3 AND 4 TO 250 PSIG (225 WAS THE MINIMUND FOR GREATER THAN 15 SECONDS EACH. ALL VALVES PASSED THE HYDRO TEST.		
COMPLETE: 09/28/89				
897565	AC-RW	DISASSEMBLE INSPECT AND REPAIR AC-10C PUMP THAT IS IN THE MAINTENANCE SHOP. SLM	MM	C
AC-RW				
CQE: Y CLASS: 3		CHECK TOTAL LIFT AS-FOUND 5/16, DISASSEMBLED AND FOUND EXCESSIVE GAP BETWEEN IMPELLER AND LINER (3/16) IMPELLERS HOOKED GOOD, LINERS WERE ROUGH AND DID NOT CONFORM TO THE SHAPE OF THE IMPELLERS. BEARINGS WERE IN NEW CONDITION. SAND CAP AND BOTTOM BEARING HAD FAILED AND WERE SEVERLY DAMAGED. SHAFT AND THRUST COLLARS WERE IN GOOD SHAPE. UPPER IMPELLER BADLY WORN ON OLD AC-10 PUMP, DISASSEMBLED FOR PARTS, SUCTION BELL WAS GOOD REA		
COMPLETE: 09/22/89				
897581	RC	CHECK CALIBRATION	IC	3
PRC-103Y				
CQE: Y CLASS:		RECALIBRATED CONTROLLER,AS FOUNDS WORE OUT OF TOLERANCE. CHECKS OK.		
COMPLETE: 09/27/89				
897582	AC-RW	RE-ADJUST IMPELLER LIFT RECORD AS FOUND AND AS LEFT READINGS	MM	C
AC-10D				
CQE: Y CLASS: 3		CHECKED AS FOUND LIFT TO BE .090 IN RESET LIFT TO .014 IN		
COMPLETE: 09/30/89				

MWO # / EQUIP ID	SYSTEM	WORK DESCRIPTION	LEAD DISC	PRINT STATUS
897603	VA-CON	RED PEN DRIVE STUCK	IC	3

PR-784/786

CQE: Y CLASS: N

COMPLETE: 09/28/89

WORK PERFORMED

PERFORMED CP-784-CHECKING RECORDER,POWER SUPPLY AND FOXBORO VOLTAGE TO C URRENT CONVERTORS-NO PROBLEM FOUND WITH ANY LOOP CONPOMENTS. COMPARED LO OP TO OTHER WIDE RANGE CHANNELS & ERF & PI ALL INDICATING 15 PSIG RETURN ED TO SERVICE.

MWO # / EQUIP ID	SYSTEM	LEAD DISC	PRINT STATUS

TOTAL RECORDS SELECTED: 41