OPERATING DATA REPORT

DOCKET NO. 50-409
DATE 01-08-81
COMPLETED BY L.S.GOODMAN
TELEPHONE 608-689-2331

OPERATING STATUS

1. Unit Name: LA CROSSE BOILING WATER REACTOR
2. Reporting Period: 0000, 12/01/80 TO 2400, 12/31/80
3. Licensed Thermal Power (MWt): 165
4. Nameplate Rating (Gross MWe): 65.3
5. Design Electrical Rating (Net MWe): 50
6. Maximum Dependable Capacity (Gross MWe): 50
7. Maximum Dependable Capacity (Net MWe): 48
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

Notes

9. Power Level To Which Restricted, If Any (Net MWe):
10. Reasons For Restrictions, If Any:

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744	8,784	97,899
12. Number Of Hours Reactor Was Critical	0	6,290.9	64,097.0
13. Reactor Reserve Shutdown Hours	0	0	478
14. Hours Generator On-Line	0	6,026.5	59,031.3
15. Unit Reserve Shutdown Hours	0	0	79
16. Gross Thermal Energy Generated (MWH)	0	799,556.9*	8,084,337.4*
17. Gross Electrical Energy Generated (MWH)	0	231,503	2,430,635
18. Net Electrical Energy Generated (MWH)	-497	214,545	2,247,280
19. Unit Service Factor	0	68.6	60.3
20. Unit Availability Factor	0	68.6	60.4
21. Unit Capacity Factor (Using MDC Net)	0	50.9	47.8
22. Unit Capacity Factor (Using DER Net)	0	48.9	45.9
23. Unit Forced Outage Rate	0	13.0	7.1

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: JANUARY 10, 1981**

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

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

*Corrected for additional 71.8 MWH generated in August 1980.
**For low power testing.

INSTRUCTIONS FOR COMPLETING OPERATING DATA REPORT

This report should be furnished each month by licensees. The name and telephone number of the preparer should be provided in the designated spaces. The instructions below are provided to assist licensees in reporting the data consistently. The number of the instruction corresponds to the item number of the report format.

1. **UNIT NAME**. Self-explanatory.

2. **REPORTING PERIOD**. Designate the month for which the data are presented.

3. **LICENSED THERMAL POWER (MW_t)** is the maximum thermal power, expressed in megawatts, currently authorized by the Nuclear Regulatory Commission.

4. **NAMEPLATE RATING (GROSS MW_e)**. The nameplate power designation of the turbine-generator in megavolt amperes (MVA) times the nameplate power factor of the turbine generator.

5. **DESIGN ELECTRICAL RATING (NET MW_e)** is the nominal net electrical output of the unit specified by the utility and used for the purpose of plant design.

6. **MAXIMUM DEPENDABLE CAPACITY (GROSS MW_e)** is the gross electrical output as measured at the output terminals of the turbine-generator during the most restrictive seasonal conditions.

7. **MAXIMUM DEPENDABLE CAPACITY (NET MW_e)**. Maximum dependable capacity (gross) less the normal station service loads.

8. Self-explanatory.

9. **POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MW_e)**. Note that this item is applicable only if restrictions on the power level are in effect. Short-term (less than one month) limitations on power level need not be presented in this item.

   Since this information is used to develop figures on capacity lost due to restrictions and because most users of the "Operating Plant Status Report" are primarily interested in energy actually fed to the distribution system, it is requested that this figure be expressed in MWe-Net in spite of the fact that the figure must be derived from MWt or percent power.

10. **REASONS FOR RESTRICTIONS, IF ANY**. If item 9 is used, item 10 should explain why. Brief narrative is acceptable. Cite references as appropriate. Indicate whether restrictions are self-imposed or are regulatory requirements. Be as specific as possible within space limitations. Plants in startup and power ascension test phase should be identified here.

11. **HOURS IN REPORTING PERIOD**. For units in power ascension at the end of the period, the gross hours from the beginning of the period or the first electrical production, whichever comes last, to the end of the period.

    For units in commercial operation at the end of the period, the gross hours from the beginning of the period or of commercial operation, whichever comes last, to the end of the period or decommissioning, whichever comes first. Adjustments in clock hours should be made in which a change from standard to daylight-savings time (or vice versa) occurs.

12. **NUMBER OF HOURS REACTOR WAS CRITICAL**. Show the total number of hours the reactor was critical during the gross hours of the reporting period.

13. **REACTOR RESERVE SHUTDOWN HOURS**. The total number of hours during the gross hours of reporting period that the reactor was removed from service for administrative or other reasons but was available for operation.

14. **HOURS GENERATOR ON-LINE**. Also called Service Hours. The total number of hours expressed to the nearest tenth of an hour during the gross hours of the reporting period that the unit operated with breakers closed to the station bus. These hours, plus those listed in Unit Shutdowns for the generator outage hours, should equal the gross hours in the reporting period.

15. **UNIT RESERVE SHUTDOWN HOURS**. The total number of hours expressed to the nearest tenth of an hour during the gross hours of the reporting period that the unit was removed from service for economic or similar reasons but was available for operation.

16. **GROSS THERMAL ENERGY GENERATED (MWH)**. The thermal output of the nuclear steam supply system during the gross hours of the reporting period, expressed in megawatt hours (no decimals).

17. **GROSS ELECTRICAL ENERGY GENERATED (MWH)**. The electrical output of the unit measured at the output terminals of the turbine-generator during the gross hours of the reporting period, expressed in megawatt hours (no decimals).

18. **NET ELECTRICAL ENERGY GENERATED (MWH)**. The gross electrical output of the unit measured at the output terminals of the turbine-generator minus the normal station service loads during the gross hours of the reporting period, expressed in megawatt hours. Negative quantities should not be used. If there is no net positive value for the period, enter zero (no decimals).

19-23. For units still in the startup and power ascension test phase, items 19-23 should not be computed. Instead, enter N A in the current month column. These five factors should be computed starting at the time the unit is declared to be in commercial operation. The cumulative figures in the second and third columns should be based on commercial operation as a starting date.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH DECEMBER 1980

DOCKET NO. 50-409
UNIT NAME LACBWR
DATE 01-08-81
COMPLETED BY L.S.GOODMAN
TELEPHONE 608-689-2331

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
80-12	11-09-80	S	744	C	2	NA	NA	NA	CONTINUATION OF REFUELING OUTAGE

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 I - Same Source

(9/77)

INSTRUCTIONS

This report should describe all plant shutdowns during the report period. In addition, it should be the source of explanation of significant dips in average power levels. Each significant reduction in power level (greater than 20% reduction in average daily power level for the preceding 24 hours) should be noted, even though the unit may not have been shut down completely[1]. For such reductions in power level, the duration should be listed as zero, the method of reduction should be listed as 4 (Other), and the Cause and Corrective Action to Prevent Recurrence column should explain. The Cause and Corrective Action to Prevent Recurrence column should be used to provide any needed explanation to fully describe the circumstances of the outage or power reduction.

NUMBER. This column should indicate the sequential number assigned to each shutdown or significant reduction in power for that calendar year. When a shutdown or significant power reduction begins in one report period and ends in another, an entry should be made for both report periods to be sure all shutdowns or significant power reductions are reported. Until a unit has achieved its first power generation, no number should be assigned to each entry.

DATE. This column should indicate the date of the start of each shutdown or significant power reduction. Report as year, month, and day. August 14, 1977 would be reported as 770814. When a shutdown or significant power reduction begins in one report period and ends in another, an entry should be made for both report periods to be sure all shutdowns or significant power reductions are reported.

TYPE. Use "F" or "S" to indicate either "Forced" or "Scheduled," respectively, for each shutdown or significant power reduction. Forced shutdowns include those required to be initiated by no later than the weekend following discovery of an off-normal condition. It is recognized that some judgment is required in categorizing shutdowns in this way. In general, a forced shutdown is one that would not have been completed in the absence of the condition for which corrective action was taken.

DURATION. Self-explanatory. When a shutdown extends beyond the end of a report period, count only the time to the end of the report period and pick up the ensuing down time in the following report periods. Report duration of outages rounded to the nearest tenth of an hour to facilitate summation. The sum of the total outage hours plus the hours the generator was on line should equal the gross hours in the reporting period.

REASON. Categorize by letter designation in accordance with the table appearing on the report form. If category H must be used, supply brief comments.

METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER. Categorize by number designation in accordance with the table appearing on the report form. If category 4 must be used, supply brief comments.

LICENSEE EVENT REPORT #. Reference the applicable reportable occurrence pertaining to the outage or power reduction. Enter the first four parts (event year, sequential report number, occurrence code and report type) of the five part designation as described in Item 17 of Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161). This information may not be immediately evident for all such shutdowns, of course, since further investigation may be required to ascertain whether or not a reportable occurrence was involved.) If the outage or power reduction will not result in a reportable occurrence, the positive indication of this lack of correlation should be noted as not applicable (N/A).

SYSTEM CODE. The system in which the outage or power reduction originated should be noted by the two digit code of Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161).

Systems that do not fit any existing code should be designated XX. The code ZZ should be used for those events where a system is not applicable.

COMPONENT CODE. Select the most appropriate component from Exhibit I - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161), using the following criteria:

A. If a component failed, use the component directly involved.

B. If not a component failure, use the related component: e.g., wrong valve operated through error; list valve as component.

C. If a chain of failures occurs, the first component to malfunction should be listed. The sequence of events, including the other components which fail, should be described under the Cause and Corrective Action to Prevent Recurrence column.

Components that do not fit any existing code should be designated XXXXXX. The code ZZZZZZ should be used for events where a component designation is not applicable.

CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE. Use the column in a narrative fashion to amplify or explain the circumstances of the shutdown or power reduction. The column should include the specific cause for each shutdown or significant power reduction and the immediate and contemplated long term corrective action taken, if appropriate. This column should also be used for a description of the major safety-related corrective maintenance performed during the outage or power reduction including an identification of the critical path activity and a report of any single release of radioactivity or single radiation exposure specifically associated with the outage which accounts for more than 10 percent of the allowable annual values.

For long textual reports continue narrative on separate paper and reference the shutdown or power reduction for this narrative.

[1]Note that this differs from the Edison Electric Institute (EEI) definitions of "Forced Partial Outage" and "Scheduled Partial Outage." For these terms, EEI uses a change of 50 MW as the break point. For larger power reactors, 50 MW is too small a change to warrant explanation.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-409
UNIT LACBWR
DATE 01-08-81
COMPLETED BY L.S.GOODMAN
TELEPHONE 608-689-2331

MONTH DECEMBER 1980

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	2	30	0
15	0	31	0
16	0		

INSTRUCTIONS

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

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

DECEMBER 1980

At the onset of the December 1980 reporting period, the plant was shut down for its scheduled refueling outage.

Major outage activities during December included refueling the core, a Type A Integrated Leak Rate Test, TMI modifications, Inservice Inspection and Technical Specification testing and anchor bolt installation.

Significant maintenance items performed during the December 1980 reporting period are indicated on the attached Instrument and Electrical Maintenance and Mechanical Maintenance listings.

INSTRUMENT AND ELECTRICAL MAINTENANCE

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
SECURITY SYSTEM CCTV #10	CORRECTIVE MR 0261	OUTAGE 80-12	NORMAL USAGE	POOR PICTURE	REPLACED UNIT WITH SPARE
SECURITY SYSTEM INTERCOM	CORRECTIVE MR 0290	OUTAGE 80-12	WIRE OPENED	NOT SERVICEABLE	REPLACED BROKEN WIRE
SECURITY SYSTEM ALARM SWITCH AP37-3	CORRECTIVE MR 0281	OUTAGE 80-12	UNKNOWN	ALARM ACTIVATED	ADJUSTED ALARM SWITCH
SECURITY SYSTEM HAZEL-TINE CTR OT-2	CORRECTIVE MR 0289	OUTAGE 80-12	CONTAMINATION	MIXED-UP LETTERING	CLEANED KEYBOARD SWITCHES
SECURITY SYSTEM MICRO-WAVE 20-5, 20-2	CORRECTIVE MR 0311 MR 0237 MR 0284 MR 0234 MR 0133	OUTAGE 80-12 " " " "	UNKNOWN " " " "	CAUSING ALARMS " " " " " " " "	RESET SYSTEM AND TESTED OK " " " " " " " " " " " " " " " "
SECURITY SYSTEM ALARM SWITCH AP48	CORRECTIVE MR 0238	OUTAGE 80-12	UNKNOWN	ALARM ACTIVATED	ADJUSTED ALARM SWITCH
SECURITY SYSTEM PRINTER	CORRECTIVE MR 0322	OUTAGE 80-12	UNKNOWN	BROKEN PLASTIC GEARS	ORDERED NEW GEARS
SEAL INJECTION 1B FLOW CONTROLLER	CORRECTIVE MR 0366	OUTAGE 80-12	NORMAL USAGE	SLUGGISH	REPLACED O-RING GASKETS
TURBINE SUMP CONTROL	CORRECTIVE MR 0320	OUTAGE 80-12	OIL IN SUMP	INOPERATIVE PUMP CONTROL	CLEANED OIL FROM SUMP
REPLACED CRD #3 PRESSURE TRANSMITTER	CORRECTIVE MR 0288	OUTAGE 80-12	NORMAL USAGE	INOPERATIVE	REPLACED TRANSMITTER
PEPLACED CRD #3 PRESSURE TRANSMITTER	CORRECTIVE MR 0287	OUTAGE 80-12	NORMAL USAGE	INOPERATIVE	REPLACED TRANSMITTER
ELECTRICAL PENETRATIONS	CORRECTIVE MR 0298 MR 0279	OUTAGE 80-12	UNKNOWN	AIR LEAKAGE	RESEALED LEAKS
REACTOR LOW PRESSURE TRANSMITTER	CORRECTIVE MR 0301	OUTAGE 80-12	MOMENTARY SHORT	BLOWN FUSE	REPLACED FUSE

INSTRUMENT AND ELECTRICAL MAINTENANCE

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
CRD #11 SECONDARY POSITION INDICATOR	CORRECTIVE MR 0295	OUTAGE 80-12	BUMPED DURING REMOVAL	INOPERATIVE	REALIGNED UNIT
CRDs #22, 23 SECONDARY POSITION INDICATOR	CORRECTIVE MR 0294	OUTAGE 80-12	BUMPED DURING REMOVAL	INOPERATIVE	REALIGNED UNIT
REACTOR BUILDING VENT VALVE	CORRECTIVE MR 0280	OUTAGE 80-12	RESEATED VALVE	LEAKAGE	RESTROKED VALVE
1A, 1B SEAL INJECTION VALVE INDICATION SWITCHES	CORRECTIVE MR 0305	OUTAGE 80-12	OIL CONTAMINATION	LAMP INOPERATIVE	CLEANED SWITCHES
FORCED CIRCULATION PUMP (FCP) 1A COUPLING OIL PUMP	CORRECTIVE MR 0306	OUTAGE 80-12	UNKNOWN	LOW OIL PRESSURE	ADJUSTED PUMP OIL PRESSURE
INSTRUMENT AIR VALVE	CORRECTIVE MR 3368	OUTAGE 80-12	BROKEN FITTING	AIR LEAKAGE	RESOLDERED AIR VALVE TO LINE
CAUSTIC HEATER	CORRECTIVE MR 0272	OUTAGE 80-12	USAGE	BURNED OUT HEATER	REPLACED HEATER ELEMENT
CRD #12 FULL OUT LAMP	CORRECTIVE MR 0278	OUTAGE 80-12	NORMAL USAGE	BURNED OUT LAMP	REPLACED LAMP
1A FCP DISCHARGE VALVE POSITIONER	CORRECTIVE MR 0222	OUTAGE 80-12	MAINTENANCE WORK	BROKEN AIR LINE	REPLACED AIR LINE
CRD #1 POSITION CABLE	CORRECTIVE MR 0248	OUTAGE 80-12	CONTAMINATION	SHORT IN CABLE	CLEANED CABLE CONNECTORS
ECC PUMP 1A PRESSURE TO CASE	CORRECTIVE MR 0233	OUTAGE 80-12	UNKNOWN	PRESSURE TO CASE LOW	ADJUSTED AIR REGULATOR TO ABOVE 2 PSI
1A SCREEN WASH PRESSURE	CORRECTIVE MR 0231	OUTAGE 80-12	LOOSE DEAD BAND	NO RESET	ADJUSTED DEAD BAND AND LOCKED
HOOD MONITOR IN HP LAB	CORRECTIVE MR 0200	OUTAGE 80-12	USAGE	NOISE IN MOTOR	REPLACED MOTOR BEARINGS

INSTRUMENT AND ELECTRICAL MAINTENANCE

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
SAFETY SYSTEM CH 1, 2 & H_2O #3	PREVENTIVE	OUTAGE 80-12	TEST DUE	COMPLETED TESTS	COMPLETED TECHNICAL SPECIFICATION TESTS FOR CH 1, 2 & H_2O LEVEL #3
NUCLEAR INSTRUMENT CH N-1 THROUGH N-9	PREVENTIVE	OUTAGE 80-12	TEST DUE	COMPLETED TESTS	COMPLETED NUCLEAR INSTRUMENTATION TECHNICAL SPECIFICATION TESTS CH N-1 THROUGH N-9
18 MONTH BATTERY TESTS	PREVENTIVE MR 0168	OUTAGE 80-12	TEST DUE	COMPLETED TESTS	COMPLETED TESTS FOR REACTOR PLANT, GENERATOR PLANT, AND DIESEL 1B BATTERY BANKS
1A & 1B DIESEL TESTS	PREVENTIVE	OUTAGE 80-12	TESTS DUE	COMPLETED TESTS	COMPLETED TRANSFER TESTING
TURBINE BUILDING RADIATION AIR MONITOR	CORRECTIVE MR 0324	OUTAGE 80-12	DEFECTIVE RESISTOR	NO VOLTAGE	REPLACED POWER RESISTOR
CONTAINMENT BUILDING AIR VENT VALVES	CORRECTIVE FC 73-80-2	OUTAGE 80-12	NRC REQUEST	REPLACED SOLENOID VALVES	REPLACED VALVES WITH LOCA PROOF DESIGN UNITS
STACK GAS MONITOR ATWS	FACILITY CHANGE 45-80-3 MR 0131 FACILITY CHANGE 50-80-2	OUTAGE 80-12 OUTAGE 80-12	NA NA	NA NA	INSTALLED WIRING INSTALLED

MECHANICAL MAINTENANCE

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
MAIN STEAM ROTOPORT VALVE #64-30-001	PREVENTIVE	OUTAGE 80-12	NA	NA	PERFORMED PREVENTIVE MAINTENANCE CHECKS AND GREASED
F C P ROTOPORT VALVES #50-30-001, 002, 003 AND 004	PREVENTIVE	OUTAGE 80-12	NA	NA	PERFORMED PREVENTIVE MAINTENANCE CHECKS AND GREASED
1A AND 1B DIESEL IN CRIB HOUSE	PREVENTIVE MR 0250	OUTAGE 80-12	NA	NA	PERFORMED 5-YEAR PREVENTIVE MAINTENANCE CHECKS BY DIESEL REPRESENTATIVE FROM MID-STATE MACHINERY
DRAIN ISOLATION VALVE #54-24-035	CORRECTIVE MR 0118	OUTAGE 80-12	VALVE NOT OPERABLE	VALVE WOULD NOT OPEN OR CLOSE	REMOVED GROUT FROM VALVE
4" VENT HEADER VALVE #55-25-003	CORRECTIVE MR 0275	OUTAGE 80-12 LER-80-17	WORN SEAT	LEAKED THROUGH	REPLACE VALVE WITH COMPLETE NEW VALVE
LOWER CONTROL ROD DRIVES (LCRDs) #22-27-28	CORRECTIVE MR 0293	OUTAGE 80-12	PACKING	LEAKED	LIGHTENED PACKING FOLDER
LCRDs NOS. 5 AND 23	CORRECTIVE MR 0293	OUTAGE 80-12	SEAL DEFORMED	LEAKED	REPLACED SEAL O-RINGS
1A SEAL INJECTION 52-006-001	CORRECTIVE MR 0262	OUTAGE 80-12	WORN PACKING	EXCESSIVE LEAKAGE	REPLACED PACKING ON ALL THREE PLUNGERS
LOWER CRDs NOS. 1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 27, 29	PREVENTIVE MAINTENANCE COMPLETED ON ALL AND BENCH TESTED - MR 0126	OUTAGE 80-12	NA	NA	PERFORMED PREVENTIVE MAINTENANCE CHECKS
UPPER CRDs NOS. 22, 15, 23, 14	CORRECTIVE AND PREVENTIVE MR 0187, 3123, MR 3379, 3166	OUTAGE 80-12	MECHANICAL SEAL LEAKS	WATER LEAKAGE	PERFORMED PREVENTIVE MAINTENANCE CHECKS AND REPLACED MECHANICAL SEALS

MECHANICAL MAINTENANCE

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
RETENTION TANK VALVE #54-25-006	CORRECTIVE MR 0199	OUTAGE 80-12 LER-80-15	ERODED SEAT	LEAKED THROUGH	LAPPED DISC AND SEAT
SHUTDOWN CONDENSER	INSERVICE INSPECTION MR 0217	OUTAGE 80-12	NA	NA	CHECK TUBE WALL THICKNESS
DECAY HEAT PUMP	CORRECTIVE MR 3189	OUTAGE 80-12	WEAR	WATER LEAKAGE	REPLACED MECHANICAL SEAL
MAIN STEAM SAFETY VALVES #62-27-001, 002 & 003	PREVENTIVE MR 0241	OUTAGE 80-12	NA	NA	CHECKED RELIEF PRESSURE
1A FORCED CIRCULATION PUMP	CORRECTIVE MR 0249	OUTAGE 80-12	WEAR	EXCESSIVE LEAKAGE	REPLACED UPPER SEALS, MECHANICAL SEAL AND ALL O-RINGS
MAIN CONDENSER	INSERVICE INSPECTION MR 0225	OUTAGE 80-12	NA	NA	EDDY CURRENT TEST AND CLEANED
EMERGENCY SERVICE WATER SUPPLY SYSTEM	FACILITY CHANGE 83-80-01 MR 0267	OUTAGE 80-12	NA	NA	INSTALLATION
HALON SYSTEM FOR ELECT. EQUIPMENT ROOM	MR 0223	OUTAGE 80-12	NA	NA	INSTALLATION
SAMPLING SYSTEM	FACILITY CHANGE 71-80-1	OUTAGE 80-12	NA	NA	INSTALLATION
SHUTDOWN CONDENSER INLET VALVES	PREVENTIVE MR 0218	OUTAGE 80-12	PREVENTIVE MAINTENANCE	PREVENTIVE MAINTENANCE	PREVENTIVE MAINTENANCE
1B EMERGENCY DIESEL GENERATOR CO_2 SYSTEM	FACILITY CHANGE 06-80-01	OUTAGE 80-12	NA	NA	MANUAL INITIATION BOTTLES INSTALLED

19. **UNIT SERVICE FACTOR**. Compute by dividing hours the generator was on line (item 14) by the gross hours in the reporting period (item 11). Express as percent to the nearest tenth of a percent. Do not include reserve shutdown hours in the calculation.

20. **UNIT AVAILABILITY FACTOR**. Compute by dividing the unit available hours (item 14 plus item 15) by the gross hours in the reporting period (item 11). Express as percent to the nearest tenth of a percent.

21. **UNIT CAPACITY FACTOR (USING MDC NET)**. Compute by dividing net electrical energy generated (item 18) by the product of maximum dependable capacity (item 7) times the gross hours in the reporting period (item 11). Express as percent to the nearest tenth of a percent.

22. **UNIT CAPACITY FACTOR (USING DER NET)**. Compute as in item 21, substituting design electrical rating (item 5) for maximum dependable capacity.

23. **UNIT FORCED OUTAGE RATE**. Compute by dividing the total forced outage hours (from the table in Unit Shutdowns and Power Reductions) by the sum of hours generator on line (item 14) plus total forced outage hours (from the table in Unit Shutdowns and Power Reductions). Express as percent to the nearest tenth of a percent.

24. **SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH)**. Include type (refueling, maintenance, other), proposed date of start of shutdown, and proposed length of shutdown. It is recognized that shutdowns may be scheduled between reports and that this item may not be all inclusive. Be as accurate as possible as of the date the report is prepared. This item is to be prepared each month and updated if appropriate until the actual shutdown occurs.

25. Self-explanatory.

26. Self-explanatory. Note, however, that this information is requested for all units in startup and power ascension test status and is not required for units already in commercial operation.

    TEST STATUS is defined as that period following initial criticality during which the unit is tested at successively higher outputs, culminating with operation at full power for a sustained period and completion of warranty runs. Following this phase, the unit is generally considered by the utility to be available for commercial operation.

    Date of **COMMERCIAL OPERATION** is defined as the date that the unit was declared by the utility owner to be available for the regular production of electricity, usually related to the satisfactory completion of qualification tests as specified in the purchase contract and to the accounting policies and practices of the utility.