

BYRON NUCLEAR POWER STATION

UNIT 1

MONTHLY PERFORMANCE REPORT

COMMONWEALTH EDISON COMPANY

NRC DOCKET NO. 050-454

LICENSE NO. NPF-37

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PDR ADDCK 05000454  
R PDR

(0625M/62M)

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I. Monthly Report for Byron Unit 1

A. Summary of Operating Experience for Unit 1

The unit began this reporting period on July 1 in a critical mode while operating with a discretionary load reduction to 70% power to minimize the rate of Steam Generator Tube corrosion and to prevent a back to back outage schedule with Unit 2.

On July 2, unidentified leakage of greater than 1 gpm was discovered during a surveillance and the unit went through a controlled shutdown. The leakage was found to be coming from a Resistance Temperature Detector Isolation valve.

While heating up the unit in order to perform a restart, the C pressurizer relief valve lifted at a pressure which was lower than the desired setpoint. During this time, both the A and C pressurizer relief valves exhibited excessive leakage. Repair of the A and C pressurizer relief valves caused a delay in the start-up of the unit.

The unit was taken critical again on July 23 at 2357 hours and the generator was synchronized onto the grid on July 24 at 0400 hours. The unit remained critical through the end of this reporting period.

## B. OPERATING DATA REPORT

DOCKET NO.: 050-454  
UNIT: Byron One  
DATE: 8/11/86  
COMPILED BY: P. Dandrea  
TELEPHONE: (815)234-5441  
x2341

### OPERATING STATUS

1. Reporting Period: July 1986. Gross Hours: 744
2. Currently Authorized Power Level (MWt): 3411  
Design Electrical Rating: 1175 (MWe-gross)  
Design Electrical Rating: 1120 (MWe-net)  
Max Dependable Capacity (MWe-net): NOT DETERMINED
3. Power Level to Which Restricted (If Any): 1152 (MWe-gross)
4. Reasons for Restriction (If Any): Not meeting minimum requirement on split feedwater flow.

	THIS MONTH	YR TO DATE	CUMULATIVE*
5. Report Period Hrs.	744	5087	7656
6. Rx Critical Hours	241.7	4202.8	6195.3
7. Rx Reserve Shutdown Hours	0	21.7	37.8
8. Hours Generator on Line	236.1	4152.1	5344.5
9. Unit Reserve Shutdown Hours	0	0	0
10. Gross Thermal Energy (MWH)	615385	12234086	15573278
11. Gross Elec. Energy (MWH)	208906	4136033	5224623
12. Net Elec. Energy (MWH)	186841	3894103	4907001
13. Reactor Service Factor	32.5	82.6	80.9
14. Reactor Availability Factor	32.5	83.0	81.4
15. Unit Service Factor	31.7	81.6	69.8
16. Unit Availability Factor	31.7	81.6	69.8
17. Unit Capacity Factor (MDC net)	N/A	N/A	N/A
18. Unit Capacity Factor (DER net)	22.4	68.3	57.2
19. Unit Forced Outage Hrs.	507.9	610.6	713.2
20. Unit Forced Outage Rate	68.3	12.8	11.8
21. Shutdowns Scheduled Over Next 6 Months:	None.		
22. If Shutdown at End of Report Period, Estimated Date of Startup:	N/A		
23. Units in Test Status (Prior to Commercial Operation):	None		

\*Note - The cumulative numbers do not reflect power generated prior to commercial service.

C. AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.: 050-454  
UNIT: Byron One  
DATE: 8/11/86  
COMPILED BY: P. Dandrea  
TELEPHONE: (815)234-5441  
x2341

MONTH: July, 1986

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1. 802 MW	17. 0 MW
2. 734 MW	18. 0 MW
3. 0 MW	19. 0 MW
4. 0 MW	20. 0 MW
5. 0 MW	21. 0 MW
6. 0 MW	22. 0 MW
7. 0 MW	23. 0 MW
8. 0 MW	24. 325 MW
9. 0 MW	25. 797 MW
10. 0 MW	26. 802 MW
11. 0 MW	27. 802 MW
12. 0 MW	28. 922 MW
13. 0 MW	29. 1120 MW
14. 0 MW	30. 975 MW
15. 0 MW	31. 1027 MW
16. 0 MW	

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. These figures will be used to plot a graph for each reporting month. Note that when maximum dependable capacity is used for the net electrical rating of the unit there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line.) In such cases the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

Report Period July, 1986

UNIT SHUTDOWNS/REDUCTIONS

\*\*\*\*\*  
\* BYRON \*  
\*\*\*\*\*

No.	Date	Type	Hours	Reason	Method	LER Number	System	Component	Cause & Corrective Action to Prevent Recurrence
10)	7/03/86	F	507.9	A	1	86-020	RC	Valve	Plant shutdown due to excessive Reactor Coolant System leakage from resistance temperature detector isolation valve.

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\* Summary \*  
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Unit 1 was on line for 2 days, had an outage of 21 days due to RTD isolation valve leakage and relief valve problems, and returned to power for the remaining 8 days of July.

TYPE	Reason	Method	System & Component
F-Forced	A-Equip Failure	1-Manual	Exhibit F & H
S-Sched	F-Admin	2-Manual Scram	Instructions for
	B-Maint or Test	3-Auto Scram	Preparation of
	G-Oper Error	4-Continued	Data Entry Sheet
	C-Refueling	5-Reduced Load	Licensee Event Report
	H-Other	9-Other	(LER) File (NUREG-0161)
	D-Regulatory Restriction		
	E-Operator Training		
	& License Examination		

(0625M/0062M)

E. UNIQUE REPORTING REQUIREMENTS

1. Safety/Relief valve operations for Unit One.

<u>DATE</u>	<u>VALVES ACTUATED</u>	<u>NO &amp; TYPE ACTUATION</u>	<u>PLANT CONDITION</u>	<u>DESCRIPTION OF EVENT</u>
7-18-86	1RY8010C	Pressurizer Safety Valve	Mode 3 Temperature 520°F Pressure 1700 PSIG	Excessive Valve Leakage due to Missing Valve Disk Caused Lift.

2. Licensee generated changes to ODCM. (Y/N)

No

#### F. LICENSEE EVENT REPORTS

The following is a tabular summary of all Licensee Event Reports for Byron Nuclear Power Station, Unit One, submitted during the reporting period, July 1 through July 31, 1986. This information is provided pursuant to the reportable occurrence reporting requirements as set forth in 10CFR 50.73.

<u>Licensee Event Report Number</u>	<u>Date</u>	<u>Title of Occurrence</u>
86-021-00	7-14-86	Technical Specification Action Statement exceeded due to misinterpretation of the requirement
86-019-00	7-29-86	Technical Specification Action Statement for power range nuclear instrumentation not satisfied due to personnel error
86-020-00	7-29-86	Plant shutdown due to excessive reactor coolant system leakage from Resistance Temperature Detector isolation valve
86-022-00	7-31-86	Nuclear Instrumentation Action Response exceeded due to personnel error

August 11, 1986  
LTR: BYRON 86-0926  
File: 2.7.200

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

ATTN: Document Control Desk

Gentlemen:

Enclosed for your information is the Monthly Performance Report covering Byron Nuclear Power Station for the period July 1 through July 30, 1986.

Very truly yours,



R. E. Querio  
Station Manager  
Byron Nuclear Power Station

REQ/PHD/lr

cc: J.G. Keppler, NRC, Region III  
NRC Resident Inspector Byron  
Gary Wright, Ill. Dept. of Nuclear Safety  
D.P. Galle  
T. J. Maiman  
D.L. Farrar  
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