



**Commonwealth Edison**  
Byron Nuclear Station  
4450 North German Church Road  
Byron, Illinois 61010

October 8, 1994

LTR: BYRON 94-0396  
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  
September 1 through September 30, 1994.

Sincerely,

  
G. K. Schwartz  
Station Manager  
Byron Nuclear Power Station

GKS/RC/rp

cc:  
J.B. Martin, NRC, Region III  
NRC Resident Inspector Byron  
IL Dept. of Nuclear Safety  
Regulatory Services Manager  
Nuclear Fuel Services, PWR Plant Support  
D.R. Eggett, Station Nuclear Engineering  
INPO Records Center  
G.F. Dick, Jr. - USNRC  
F. Yost - Utility Data Institute, Inc.

190000

(9928MM/100894/1)

9410200100 940930  
PDR ADOCK 05000454  
R PDR

JE24

BYRON NUCLEAR POWER STATION

UNIT 1 AND UNIT 2

MONTHLY PERFORMANCE REPORT

COMMONWEALTH EDISON COMPANY

NRC DOCKET NO. 050-454

NRC DOCKET NO. 050-455

LICENSE NO. NPF-37

LICENSE NO. NPF-66

I. Monthly Report for Byron UNIT 1 for the month of September 1994

A. Summary of Operating Experience for Unit 1

The Unit began this reporting period in Mode 1 (Power Operations).

The power level varied due to B1R06 Coastdown.

## B. OPERATING DATA REPORT

DOCKET NO.: 050-454  
UNIT: Byron One  
DATE: 10/08/94  
COMPILED BY: R. Colglazier  
TELEPHONE: (815) 234-5441  
x2282

### OPERATING STATUS

1. Reporting Period: September, 1994. Gross Hours: 720
2. Currently Authorized Power Level: 3411 (MWt)  
Design Electrical Rating: 1175 (MWe-gross)  
Design Electrical Rating: 1120 (MWe-net)  
Max Dependable Capacity: 1105 (MWe-net)
3. Power Level to Which Restricted (If Any): None
4. Reasons for Restriction (If Any): N/A

	THIS MONTH	YR TO DATE	CUMULATIVE*
5. Report Period Hrs.	720	6,551	79,248
6. Rx Critical Hours	169.4	6,000.4	66,810.9
7. Rx Reserve Shutdown Hours	0	0	38
8. Hours Generator on Line	168.6	5,999.6	66,131.7
9. Unit Reserve Shutdown Hours	0	0	0
*10. Gross Thermal Energy (MWH)	259,090	18,241,053	201,302,152
11. Gross Elec. Energy (MWH)	83,986	6,245,959	68,064,504
12. Net Elec. Energy (MWH)	69,537	5,943,751	64,507,086
13. Reactor Service Factor	23.53	91.60	84.31
14. Reactor Availability Factor	23.53	91.60	84.35
15. Unit Service Factor	23.42	91.58	83.45
16. Unit Availability Factor	23.42	91.58	83.45
17. Unit Capacity Factor (MDC net)	8.74	82.11	73.66
18. Unit Capacity Factor (DER net)	8.62	81.01	72.68
19. Unit Forced Outage Hrs.	0	0	1,498.2
20. Unit Forced Outage Rate	0	0	2.22
21. Shutdowns Scheduled Over Next 6 Months: 1 (B1R06)			
22. If Shutdown at End of Report Period, Estimated Date of Startup: 11/12/94			
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: 10/08/94  
COMPILED BY: R. Colglazier  
TELEPHONE: (815) 234-5441  
x2282

MONTH: September, 1994

DAY      AVERAGE DAILY POWER LEVEL  
          (MWe-Net)

1.      _____ 481 MW _____	16.      _____ -13 MW _____
2.      _____ 475 MW _____	17.      _____ -13 MW _____
3.      _____ 464 MW _____	18.      _____ -13 MW _____
4.      _____ 458 MW _____	19.      _____ -13 MW _____
5.      _____ 455 MW _____	20.      _____ -13 MW _____
6.      _____ 452 MW _____	21.      _____ -13 MW _____
7.      _____ 416 MW _____	22.      _____ -13 MW _____
8.      _____ -10 MW _____	23.      _____ -13 MW _____
9.      _____ -14 MW _____	24.      _____ -14 MW _____
10.      _____ -14 MW _____	25.      _____ -15 MW _____
11.      _____ -14 MW _____	26.      _____ -14 MW _____
12.      _____ -14 MW _____	27.      _____ -13 MW _____
13.      _____ -13 MW _____	28.      _____ -12 MW _____
14.      _____ -13 MW _____	29.      _____ -12 MW _____
15.      _____ -13 MW _____	30.      _____ -12 MW _____
	31.      _____ _____

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: September, 1994

UNIT SHUTDOWNS/REDUCTIONS  
(UNIT 1)

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

No.	Date	Type	Hours	Reason	Method	LER Number	System	Component	Cause & Corrective Action to Prevent Recurrence
5	09/08/94	S	551.2	C	2				Began B1R06 U-1 RX Tripped on SR High Flux Just As Reactor Power Had Decreased Below P-10.

\*\*\*\*\*  
\* Summary \*  
\*\*\*\*\*

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

E. UNIQUE REPORTING REQUIREMENTS (UNIT 1) for the month of September, 1994

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>
-------------	----------------------------	------------------------------------	----------------------------	---------------------------------

None

2. Licensee generated changes to ODCM.

None

3. Indications of failed fuel.

No. Fuel Reliability Indicator: FRI = 0  $\mu$ Ci/CC

F. LICENSEE EVENT REPORTS (UNIT 1)

The following is a tabular summary of all Licensee Event Reports for Byron Nuclear Power Station, Unit One, occurring during the reporting period, September 1, 1994 through September 30, 1994. 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>Occurrence Date</u>	<u>Title of Occurrence</u>
454: 94-009	09/08/94	Reactor Trips Due To SSPS Circuit Board Failure.
454: 94-011	09/24/94	IST Surveillances For Several Valves Performed Past Critical Dates.



II. Monthly Report for Byron UNIT 2 for the month of September 1994

A. Summary of Operating Experience for Unit 2

The Unit began this reporting period in Mode 1 (Power Operations).

B. OPERATING DATA REPORT

DOCKET NO.: 050-455  
UNIT: Byron Two  
DATE: 10/08/94  
COMPILED BY: R. Colglazier  
TELEPHONE: (815)234-5441  
x2282

OPERATING STATUS

1. Reporting Period: September, 1994. Gross Hours: 720
2. Currently Authorized Power Level: 3411 (MWt)  
Design Electrical Rating: 1175 (MWe-gross)  
Design Electrical Rating: 1120 (MWe-net)  
Max Dependable Capacity: 1105 (MWe-net)
3. Power Level to Which Restricted (If Any): None
4. Reasons for Restriction (If Any): N/A

	THIS MONTH	YR TO DATE	CUMULATIVE*
5. Report Period Hrs.	720	6,551	62,352
6. Rx Critical Hours	669.5	6,500.5	54,306.4
7. Rx Reserve Shutdown Hours	0	0	0
8. Hours Generator on Line	664.2	6,495.2	53,700.8
9. Unit Reserve Shutdown Hours	0	0	0
10. Gross Thermal Energy (MWH)	2,096,254	21,525,120	157,597,047
11. Gross Elec. Energy (MWH)	718,605	7,400,461	53,583,735
12. Net Elec. Energy (MWH)	685,737	7,069,244	50,852,471
13. Reactor Service Factor	92.99	99.23	87.10
14. Reactor Availability Factor	92.99	99.23	87.10
15. Unit Service Factor	92.25	99.15	86.13
16. Unit Availability Factor	92.25	99.15	86.13
17. Unit Capacity Factor (MDC net)	86.19	97.66	73.81
18. Unit Capacity Factor (DER net)	85.04	96.35	72.82
19. Unit Forced Outage Hrs.	35.80	55.80	1,399.2
20. Unit Forced Outage Rate	7.75	0.85	2.54
21. Shutdowns Scheduled Over Next 6 Months: 1 (B2R05)			
22. If Shutdown at End of Report Period, Date of Startup: None			
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.: 050-455  
UNIT: Byron Two  
DATE: 10/08/94  
COMPILED BY: R. Colglazier  
TELEPHONE: (815)234-5441  
x2282

MONTH: September, 1994

DAY      AVERAGE DAILY POWER LEVEL  
          (MWe-Net)

1. _____	1011 MW	16. _____	1111 MW
2. _____	1080 MW	17. _____	1119 MW
3. _____	808 MW	18. _____	1031 MW
4. _____	786 MW	19. _____	1085 MW
5. _____	848 MW	20. _____	1114 MW
6. _____	1043 MW	21. _____	1116 MW
7. _____	1088 MW	22. _____	1119 MW
8. _____	1091 MW	23. _____	1128 MW
9. _____	1083 MW	24. _____	468 MW
10. _____	1082 MW	25. _____	-14 MW
11. _____	1060 MW	26. _____	46 MW
12. _____	1092 MW	27. _____	527 MW
13. _____	1093 MW	28. _____	1113 MW
14. _____	1095 MW	29. _____	1121 MW
15. _____	1103 MW	30. _____	1114 MW
		31. _____	

## 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: September, 1994

UNIT SHUTDOWNS/REDUCTIONS  
(UNIT 2)

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

No.	Date	Type	Hours	Reason	Method	LER Number	System	Component	Cause & Corrective Action To Prevent Recurrence
5	09/24/94	F	55.8	A	3		RD	Control Card	Card Failure Causing Rod Drop And Subsequent Forced Outage B2F15

\*\*\*\*\*  
\* Summary \*  
\*\*\*\*\*

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		

E. UNIQUE REPORTING REQUIREMENTS (UNIT 2) for the month of September 1994

1. Safety/Relief valve operations for Unit Two.

<u>DATE</u>	<u>VALVES ACTUATED</u>	<u>NO &amp; TYPE ACTUATION</u>	<u>PLANT CONDITION</u>	<u>DESCRIPTION OF EVENT</u>
None				

2. Licensee generated changes to ODCM.

None

3. Indications of failed fuel.

No. Fuel Reliability Indicator: FRI =  $2.78 \text{ E-5 } \mu\text{Ci/CC}$

F. LICENSEE EVENT REPORTS (UNIT 2)

The following is a tabular summary of all Licensee Event Reports for Byron Nuclear Power Station, Unit Two, occurring during the reporting period, September 1, 1994 through September 30, 1994. 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>Occurrence Date</u>	<u>Title of Occurrence</u>
94-002	09/23/94	Rod Urgent Failure Alarm Causes SDB To Remain In Core.
94-003	09/24/94	Auto Start Of The 2B AF Pumps On LoLo Steam Generator Level.
94-004	09/24/94	Reactor Trip On Negative Flux Rate.