



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

September 10, 1990

LTR: BYRON 90-0890
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 August 1 through August 31, 1990.

Sincerely,

R. Pleniewicz
Station Manager
Byron Nuclear Power Station

RP/mlm (0625M/0062M)

cc: A.B. Davis, NRC, Region III
NRC Resident Inspector Byron
Ill. Dept. of Nuclear Safety
M. J. Wallace/K.L. Graesser
Nuclear Licensing Manager
Nuclear Fuel Services, PWR Plant Support
D. R. Eggett, Station Nuclear Engineering
INPO Records Center
T. Boyce - USNRC

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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 August 1990

A. Summary of Operating Experience for Unit 1

The unit began this reporting period in Mode 1 (Power Operation) at approximately 97% power. On August 19, during a heavy thunderstorm with lightning, Unit 1 reactor trip occurred from an automatic RPS signal of "Power Range Flux Negative Rate High Reactor Trip." On August 20 at 1132 the Unit was critical and at 1425 the Unit was synchronized. The unit operated at power levels of up to 100% for the remainder of the month.

B. OPERATING DATA REPORT

DOCKET NO.: 050-454
 UNIT: Byron One
 DATE: 09/10/90
 COMPILED BY: K. Orris
 TELEPHONE: (815)234-5441
 x2444

OPERATING STATUS

1. Reporting Period: August, 1990. Gross Hours: 744
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): N/A
4. Reasons for Restriction (If Any):

	THIS MONTH	YR TO DATE	CUMULATIVE*
5. Report Period Hrs.	744	5,831	43,464
6. Rx Critical Hours	712.9	4,247.1	34,787.1
7. Rx Reserve Shutdown Hours	0	0	38
8. Hours Generator on Line	710.1	4,170.1	34,264.1
9. Unit Reserve Shutdown Hours	0	0	0
10. Gross Thermal Energy (MTH)	2,112,190	12,536,741	103,797,181
11. Gross Elec. Energy (MWH)	714,154	4,244,684	34,989,102
12. Net Elec. Energy (MWH)	673,396	3,994,539	32,972,571
13. Reactor Service Factor	95.8	72.8	80.0
14. Reactor Availability Factor	95.8	72.8	80.1
15. Unit Service Factor	95.4	71.5	78.8
16. Unit Availability Factor	95.4	71.5	78.8
17. Unit Capacity Factor (MDC net)	81.9	62.0	68.7
18. Unit Capacity Factor (DER net)	80.8	61.2	67.7
19. Unit Forced Outage Hrs.	33.9	171.9	1,228.9
20. Unit Forced Outage Rate	4.5	3.9	3.5

21. Shutdowns Scheduled Over Next 6 Months: None
22. If Shutdown at End of Report Period, Estimated Date of Startup:
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: 09/10/90
COMPILED BY: K. Orris
TELEPHONE: 419-5441
42466

MONTH: August, 1990

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

1. _____	987 MW	16. _____	1027 MW
2. _____	1028 MW	17. _____	1057 MW
3. _____	1089 MW	18. _____	1021 MW
4. _____	1065 MW	19. _____	169 MW
5. _____	920 MW	20. _____	73 MW
6. _____	1013 MW	21. _____	242 MW
7. _____	1016 MW	22. _____	540 MW
8. _____	973 MW	23. _____	848 MW
9. _____	985 MW	24. _____	1017 MW
10. _____	985 MW	25. _____	1042 MW
11. _____	1012 MW	26. _____	955 MW
12. _____	959 MW	27. _____	1057 MW
13. _____	1019 MW	28. _____	1022 MW
14. _____	1054 MW	29. _____	895 MW
15. _____	1064 MW	30. _____	904 MW
		31. _____	1001 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 August, 1990

UNIT SHUTDOWNS/REDUCTIONS
(UNIT 1)

* BYRON *

No.	Date	Type	Hours	Reason	Method	LER Number	System	Component	Cause & Corrective Action to Prevent Recurrence
8.	08/19/90	F	33:59	A	3		RD		During a heavy thunderstorm with lightning Unit 1 Rx trip occurred from an automatic RPS signal of "PWR Range Flux Negative Rate High Rx Trip."

* Summary *

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

4. UNIQUE REPORTING REQUIREMENTS (UNIT 1) for the month of August 1990

1. Safety/Relief valve operations for Unit One.

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

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

No

3. Indications of failed fuel. (Y/N)

Fuel Reliability Indicator: FRI = $1.5E-4$ μ 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, submitted during the reporting period, August 1 through August 31, 1990. 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>
90-009	7/14/90	Missed sample required by an inoperable radiation monitor due to mis-communication and personnel error.

II. Monthly Report for Byron UNIT 2 for the month of August 1990

A. Summary of Operating Experience for Unit 2

The unit began this reporting period in Mode 1 (Power Operation) at approximately 58.6% power. The unit is in coastdown in preparation for its refueling outage scheduled for September.

B. OPERATING DATA REPORT

DOCKET NO.: 050-455
UNIT: Byron Two
DATE: 09/10/90
COMPILED BY: K. Orris
TELEPHONE: (815)234-5441
x2444

OPERATING STATUS

1. Reporting Period: August, 1990. Gross Hours: 744
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): N/A
4. Reasons for Restriction (If Any):

	THIS MONTH	YR TO DATE	CUMULATIVE*
5. Report Period Hrs.	744	5,831	26,568
6. Rx Critical Hours	744	5,682.3	23,747.3
7. Rx Reserve Shutdown Hours	0	0	0
8. Hours Generator on Line	744	5,669.5	23,354.5
9. Unit Reserve Shutdown Hours	0	0	0
10. Gross Thermal Energy (MWH)	1,245,104	16,148,701	61,716,310
11. Gross Elec. Energy (MWH)	396,694	5,517,202	20,862,002
12. Net Elec. Energy (MWH)	361,813	5,212,337	19,602,473
13. Reactor Service Factor	100	97.4	89.4
14. Reactor Availability Factor	100	97.4	89.4
15. Unit Service Factor	100	97.2	87.9
16. Unit Availability Factor	100	97.2	87.9
17. Unit Capacity Factor (MDC net)	44	80.9	66.8
18. Unit Capacity Factor (DER net)	43.4	79.8	65.9
19. Unit Forced Outage Hrs.	0	26	845
20. Unit Forced Outage Rate	0	0.5	3.5

21. Shutdowns Scheduled Over Next 6 Months: 1 - September
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.: 050-455
UNIT: Byron Two
DATE: 09/10/90
COMPILED BY: K. Orris
TELEPHONE: (815)234-5441
x2444

MONTH: August, 1990

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1.	608 MW	16.	473 MW
2.	590 MW	17.	470 MW
3.	576 MW	18.	460 MW
4.	572 MW	19.	440 MW
5.	569 MW	20.	435 MW
6.	578 MW	21.	446 MW
7.	574 MW	22.	442 MW
8.	561 MW	23.	446 MW
9.	540 MW	24.	436 MW
10.	544 MW	25.	427 MW
11.	526 MW	26.	418 MW
12.	521 MW	27.	405 MW
13.	509 MW	28.	408 MW
14.	498 MW	29.	415 MW
15.	485 MW	30.	380 MW
		31.	310 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.

(0625M/0062M/10)

Report Period August, 1990

UNIT SHUTDOWNS/REDUCTIONS
(UNIT 2)

* BYRON *

No.	Date	Type	Hours	Reason	Method	LER Number	System Component	Cause & Corrective Action to Prevent Recurrence
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No unit shutdown or major reductions for Unit 2 in August.

* 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 August 1990

1. Safety/Relief valve operations for Unit Two.

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

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

No.

3. Indications of failed fuel. (Y/N)

Yes. Approximately two to five leaking fuel pins.
Fuel Reliability Indicator = $2.3E-3$ $\mu\text{Ci/cc}$

F. LICENSEE EVENT REPORTS (UNIT 2)

The following is a tabular summary of all Licensee Event Reports for Byron Nuclear Power Station, Unit Two, submitted during the reporting period, August 1 through August 31, 1990. 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>
90-002	7/14/90	Feedwater isolation signal generated from the Train B Reactor Trip Breaker.
90-003	7/17/90	P-14 Feedwater isolation due to difficulty controlling Steam Generator level at low power.