

Commonwealth Edison Company  
Byron Generating Station  
4450 North German Church Road  
Byron, IL 61010-9794  
Tel 815-234-5441



November 8, 1996

LTR: BYRON 96-0313  
FILE: 2.7.200

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Monthly Operating Report  
Byron Nuclear Power Station, Units 1 and 2  
NRC Docket Numbers: 50: 454 and 455

Gentlemen:

Enclosed for your information is the Monthly Operating Report covering  
Byron Nuclear Power Station for the period November 1 through  
November 30, 1996.

Sincerely,

A handwritten signature in cursive script, appearing to read "K. L. Kofron".

K. L. Kofron  
Station Manager  
Byron Nuclear Power Station

KLK/JV/ld

cc: A.B. Beach, Regional Administrator - RIII  
G. Dick, Byron Project Manager - NRR  
S. Burgess, Senior Resident Inspector - Byron  
Office of Nuclear Safety - IDNS  
INPO Records Center  
F. Yost - Utility Data Institute, Inc.

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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 November, 1996.

A. Summary of Operating Experience for Unit 1

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

B. OPERATING DATA REPORT UNIT ONE

DOCKET NO.: 050-454  
UNIT: Byron One  
DATE: 12/10/96  
COMPILED BY: J. Vogl  
TELEPHONE: (815)234-5441  
x2282

OPERATING STATUS

1. Reporting Period: November, 1996 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        | 8,040        | 98,257        |
| 6. Rx Critical Hours  | 720        | 5,922.2      | 81,141.5      |
| 7. Rx Reserve Shutdown Hours  | 0          | 0            | 38            |
| 8. Hours Generator on Line  | 720        | 5,844.4      | 80,344        |
| 9. Unit Reserve Shutdown Hours                                      | 0          | 0            | 0             |
| *10. Gross Thermal Energy (MWH)                                     | 2,356,694  | 18,625,605.8 | 246,390,560.8 |
| 11. Gross Elec. Energy (MWH)  | 815,464    | 6,367,073    | 83,423,331    |
| 12. Net Elec. Energy (MWH)  | 779,432    | 6,048,998    | 79,101,458    |
| 13. Reactor Service Factor  | 100        | 73.66        | 82.58         |
| 14. Reactor Availability Factor                                     | 100        | 73.66        | 82.62         |
| 15. Unit Service Factor   | 100        | 72.69        | 81.77         |
| 16. Unit Availability Factor  | 100        | 72.69        | 81.77         |
| 17. Unit Capacity Factor (MDC net)                                  | 97.97      | 68.09        | 72.85         |
| 18. Unit Capacity Factor (DER net)                                  | 96.66      | 67.18        | 71.88         |
| 19. Unit Forced Outage Hrs.   | 0          | 38.9         | 1,833.4       |
| 20. Unit Forced Outage Rate   | 0          | 0.66         | 2.23          |
| 21. Shutdowns Scheduled Over Next 6 Months:                         | None       |              |               |
| 22. If Shutdown at End of Report Period, Estimated 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 UNIT ONE

DOCKET NO.: 050-454  
UNIT: Byron One  
DATE: 12/10/96  
COMPILED BY: J. Vogl  
TELEPHONE: (815) 234-5441  
x2282

MONTH: November, 1996

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

|           |         |           |         |
|-----------|---------|-----------|---------|
| 1. _____  | 1092 MW | 16. _____ | 1085 MW |
| 2. _____  | 1091 MW | 17. _____ | 1091 MW |
| 3. _____  | 1090 MW | 18. _____ | 1092 MW |
| 4. _____  | 1090 MW | 19. _____ | 1093 MW |
| 5. _____  | 1088 MW | 20. _____ | 1094 MW |
| 6. _____  | 1080 MW | 21. _____ | 1092 MW |
| 7. _____  | 1091 MW | 22. _____ | 1092 MW |
| 8. _____  | 1091 MW | 23. _____ | 1091 MW |
| 9. _____  | 1069 MW | 24. _____ | 1093 MW |
| 10. _____ | 922 MW  | 25. _____ | 1093 MW |
| 11. _____ | 1031 MW | 26. _____ | 1091 MW |
| 12. _____ | 1088 MW | 27. _____ | 1091 MW |
| 13. _____ | 1089 MW | 28. _____ | 1092 MW |
| 14. _____ | 1086 MW | 29. _____ | 1094 MW |
| 15. _____ | 1084 MW | 30. _____ | 1096 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: November, 1996

UNIT SHUTDOWNS/REDUCTIONS  
(UNIT 1)

\*\*\*\*\*  
\* BYRON \*  
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No. Date Type Hours Reason Method LER Number System Component Cause & Corrective Action to Prevent Recurrence

No shutdowns or major derating reductions for Unit One.

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

| <u>TYPE</u> | <u>Reason</u>            | <u>Method</u>  | <u>System &amp; Component</u> |
|-------------|--------------------------|----------------|-------------------------------|
| 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              |
|             | H-Other                  | 5-Reduced Load | Licensee Event Report         |
|             | C-Refueling              | 9-Other        | (LER) File (NUREG-0161)       |
|             | D-Regulatory Restriction |                |                               |
|             | E-Operator Training      |                |                               |
|             | & License Examination    |                |                               |

E. UNIQUE REPORTING REQUIREMENTS (UNIT 1) for the month of November, 1996

1. Safety/Relief valve operations for Unit One.

| <u>DATE</u> | <u>VALVES<br/>ACTUATED</u> | <u>NO &amp; TYPE<br/>ACTUATION</u> | <u>PLANT<br/>CONDITION</u> | <u>DESCRIPTION<br/>OF EVENT</u> |
|-------------|----------------------------|------------------------------------|----------------------------|---------------------------------|
|-------------|----------------------------|------------------------------------|----------------------------|---------------------------------|

None

2. Licensee generated changes to ODCM.

None

3. Indications of failed fuel.

No. Fuel Reliability Indicator: FRI =  $2.3 \text{ E-5 } \mu\text{Ci/CC}$

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, November 1, 1996 through November 30, 1996. 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> |
|-------------------------------------|------------------------|----------------------------|
|-------------------------------------|------------------------|----------------------------|

None



II. Monthly Report for Byron UNIT 2 for the month of November, 1996

A. Summary of Operating Experience for Unit 2

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

B. OPERATING DATA REPORT UNIT TWO

DOCKET NO.: 050-455  
UNIT: Byron Two  
DATE: 12/10/96  
COMPILED BY: J. Vogl  
TELEPHONE: (815) 234-5441  
x2282

OPERATING STATUS

1. Reporting Period: November, 1996. 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        | 8,040        | 81,361        |
| 6. Rx Critical Hours                                      | 720        | 6,523.8      | 70,778.7      |
| 7. Rx Reserve Shutdown Hours                              | 0          | 0            | 0             |
| 8. Hours Generator on Line                                | 720        | 6,481.9      | 70,102.6      |
| 9. Unit Reserve Shutdown Hours                            | 0          | 0            | 0             |
| 10. Gross Thermal Energy (MWH)                            | 2,446,246  | 21,367,997.6 | 211,369,200.6 |
| 11. Gross Elec. Energy (MWH)                              | 843,304    | 7,333,034    | 72,038,699    |
| 12. Net Elec. Energy (MWH)                                | 806,786    | 6,996,002    | 68,467,169    |
| 13. Reactor Service Factor                                | 100        | 81.14        | 86.99         |
| 14. Reactor Availability Factor                           | 100        | 81.14        | 86.99         |
| 15. Unit Service Factor                                   | 100        | 80.62        | 86.16         |
| 16. Unit Availability Factor                              | 100        | 80.62        | 86.16         |
| 17. Unit Capacity Factor (MDC net)                        | 101.41     | 78.75        | 76.16         |
| 18. Unit Capacity Factor (DER net)                        | 100.05     | 77.69        | 75.14         |
| 19. Unit Forced Outage Hrs.                               | 0          | 416.2        | 1,815.4       |
| 20. Unit Forced Outage Rate                               | 0          | 6.03         | 2.52          |
| 21. Shutdowns Scheduled Over Next 6 Months:               | None       |              |               |
| 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 UNIT TWO

DOCKET NO. : 050-455  
UNIT: Byron Two  
DATE: 12/10/96  
COMPILED BY: J. Vogl  
TELEPHONE: (815)234-5441  
x2282

MONTH: November, 1996

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

|     |         |     |         |
|-----|---------|-----|---------|
| 1.  | 1126 MW | 16. | 1115 MW |
| 2.  | 1126 MW | 17. | 1121 MW |
| 3.  | 1123 MW | 18. | 1124 MW |
| 4.  | 1119 MW | 19. | 1125 MW |
| 5.  | 1117 MW | 20. | 1126 MW |
| 6.  | 1107 MW | 21. | 1125 MW |
| 7.  | 1119 MW | 22. | 1126 MW |
| 8.  | 1118 MW | 23. | 1124 MW |
| 9.  | 1122 MW | 24. | 1127 MW |
| 10. | 1106 MW | 25. | 1130 MW |
| 11. | 1075 MW | 26. | 1128 MW |
| 12. | 1121 MW | 27. | 1125 MW |
| 13. | 1120 MW | 28. | 1121 MW |
| 14. | 1119 MW | 29. | 1124 MW |
| 15. | 1120 MW | 30. | 1122 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: November, 1996

UNIT SHUTDOWNS/REDUCTIONS  
(UNIT 2)

\*\*\*\*\*  
\* BYRON \*  
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No.   Date   Type   Hours   Reason   Method   LER Number   System   Component   Cause & Corrective Action To Prevent Recurrence

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NO SHUTDOWNS OR MAJOR REDUCTIONS FOR UNIT TWO IN NOVEMBER

\*\*\*\*\*  
\*   Summary   \*  
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| <u>TYPE</u> | <u>Reason</u>                  | <u>Method</u>  | <u>System &amp; Component</u> |
|-------------|--------------------------------|----------------|-------------------------------|
| F-Forced    | A-Equip Failure   F-Admin      | 1-Manual       | Exhibit F & H                 |
| S-Sched     | B-Maint or Test   G-Oper Error | 2-Manual Scram | Instructions for              |
|             | C-Refueling   H-Other          | 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 2) for the month of November, 1996

1. Safety/Relief valve operations for Unit Two.

| <u>DATE</u> | <u>VALVES<br/>ACTUATED</u> | <u>NO &amp; TYPE<br/>ACTUATION</u> | <u>PLANT<br/>CONDITION</u> | <u>DESCRIPTION<br/>OF EVENT</u> |
|-------------|----------------------------|------------------------------------|----------------------------|---------------------------------|
|-------------|----------------------------|------------------------------------|----------------------------|---------------------------------|

None

2. Licensee generated changes to ODCM.

None

3. Indications of failed fuel.

Nc. Fuel Reliability Indicator: FRI = 6.8 E-5  $\mu$ 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, November 1, 1996 through November 30, 1996. 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<br/>Date</u> | <u>Title of Occurrence</u> |
|-------------------------------------|----------------------------|----------------------------|
|-------------------------------------|----------------------------|----------------------------|

None.