

Commonwealth Edison Company
Zion Generating Station
101 Shiloh Boulevard
Zion, IL 60099-2797
Tel 847-746-2084

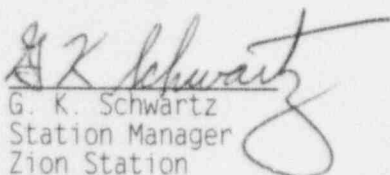


December 13, 1996

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Attached is the November Operating Status Report.


G. K. Schwartz
Station Manager
Zion Station

GKS/jlc

Enclosure

cc: Regulatory Assurance
USNRC Document Control
H. Keiser
W. Beach (NRC)
D. Farrar
D. R. Eggett
INPO
Div. of Enforcement Health
State of Illinois/IDNS
F. Yost
NRC Inspector, Zion
IDNS Inspector, Zion
Operating Engrs.
C. Y. Shiraki
Master File

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PDR ADOCK 05000295
R PDR

ZCLERK-1

A Unicom Company

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1/

OPERATING DATA REPORT

DOCKET NO. 50-295
 DATE 12/13/96
 COMPLETED BY J. CYGAN
 TELEPHONE (847)746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 110196 to 2400 113096
3. Licensed Thermal Power (Mwt): 3250
4. Nameplate Rating (Gross MWe): 1085
5. Design Electrical Rating (Net MWe): 1040
6. Maximum Dependable Capacity (Gross MWe): 1085
7. Maximum Dependable Capacity (Net MWe): 1040
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A
9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

Notes

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>720.0</u>	<u>8,040.0</u>	<u>200,904.0</u>
12. Number Of Hours Reactor Was Critical	<u>720.0</u>	<u>6,720.1</u>	<u>136,759.0</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>2,612.8</u>
14. Hours Generator On-Line	<u>720.0</u>	<u>6,424.7</u>	<u>132,821.9</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>2,324,618.0</u>	<u>20,463,252.0</u>	<u>392,158,849</u>
17. Gross Electrical Energy Generated(MWH)	<u>777,172.0</u>	<u>6,827,164.0</u>	<u>127,733,237</u>
18. Net Electrical Energy Generated (MWH)	<u>752,127.0</u>	<u>6,559,415.0</u>	<u>121,722,367</u>
19. Unit Service Factor	<u>100.0</u>	<u>79.9</u>	<u>66.1</u>
20. Unit Availability Factor	<u>100.0</u>	<u>79.9</u>	<u>66.1</u>
21. Unit Capacity Factor (Using MDC Net)	<u>100.4</u>	<u>78.4</u>	<u>58.3</u>
22. Unit Capacity Factor (Using DER Net)	<u>100.4</u>	<u>78.4</u>	<u>58.3</u>
23. Unit Forced Outage Rate	<u>00.0</u>	<u>13.1</u>	<u>16.0</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling Outage starting 4/5/97 and ending 5/25/97

25. If Shut Down At End Of Report Period, Estimated Date of Startup: _____
26. Units In Test Status (Prior to Commercial Operation): Forecast Achieved

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

OPERATING DATA REPORT

DOCKET NO. 50-304
 DATE 12/13/96
 COMPLETED BY J. CYGAN
 TELEPHONE (847) 746-2084
 X3169

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 110196 to 2400 113096
3. Licensed Thermal Power (Mwt): 3250
4. Nameplate Rating (Gross Mwe): 1085
5. Design Electrical Rating (Net Mwe): 1040
6. Maximum Dependable Capacity (Gross Mwe): 1085
7. Maximum Dependable Capacity (Net Mwe): 1040
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A
9. Power Level To Which Restricted, If Any (Net Mwe): N/A
10. Reasons For Restrictions, If Any: N/A

Notes

	This Month	Yr-to-Date	Cumulative
11. Hours In Reporting Period	720.0	8,040.0	194,617.0
12. Number Of Hours Reactor Was Critical	00.0	5,846.4	138,378.7
13. Reactor Reserve Shutdown Hours	00.0	0.0	226.1
14. Hours Generator On-Line	00.0	5,688.6	135,098.8
15. Unit Reserve Shutdown Hours	00.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	00.0	17,631,458.0	402,647,369
17. Gross Electrical Energy Generated (MWH)	00.0	5,846,647.0	130,102,951
18. Net Electrical Energy Generated (MWH)	00.0	5,618,358.0	124,095,088
19. Unit Service Factor	00.0	70.8	69.4
20. Unit Availability Factor	00.0	70.8	69.4
21. Unit Capacity Factor (Using MDC Net)	00.0	67.2	61.3
22. Unit Capacity Factor (Using DER Net)	00.0	67.2	61.3
23. Unit Forced Outage Rate	00.0	1.3	13.3
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 12/25/96
26. Units In Test Status (Prior to Commercial Operation): Forecast Achieved

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-295
 UNIT NAME Zion Unit 1
 DATE 12/13/96
 COMPLETED BY J. CYGAN
 TELEPHONE (847) 746-2084 x3169

REPORT MONTH November 1996

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down ³ Reactor	Licensee Event Report #	System Code 4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
									Unit 1 Remained On Line For The Entire Month Of November.

1
 F: Forced
 S: Scheduled

2
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance or Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & Licensee Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

3
 Method
 1-Manual
 2-Manual Trip
 3-Auto Trip
 4-Continued
 5-Reduced Load

4
 Exhibit G - Instructions
 for Preparation of Data
 Entry Sheets for Licensee
 Event Report (LER) File
 (NUREG-0161)

5
 Exhibit 1 - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-304
 UNIT NAME Zion Unit 2
 DATE 12/13/96
 COMPLETED BY J. CYGAN
 TELEPHONE (847) 746-2084 x3169

REPORT MONTH November 1996

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down ³ Reactor	Licensee Event Report #	System Code 4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
7	11/01/96	S	720.0	C	1				Unit 2 Remained Off-Line For The Entire Month Of November For Refueling Outage Z2R14.

¹
 F: Forced
 S: Scheduled

²
 Reason:
 A-Equipment Failure (Explain)
 B-Maintenance or Test
 C-Refueling
 D-Regulatory Restriction
 E-Operator Training & Licensee Examination
 F-Administrative
 G-Operational Error (Explain)
 H-Other (Explain)

³
 Method
 1-Manual
 2-Manual Trip
 3-Auto Trip
 4-Continued
 5-Reduced Load

⁴
 Exhibit G - Instructions
 for Preparation of Data
 Entry Sheets for Licensee
 Event Report (LER) File
 (NUREG-0161)

⁵
 Exhibit 1 - Same Source

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-295
 UNIT Zion Unit 1
 DATE 12/13/96
 COMPLETED BY J. CYGAN
 TELEPHONE (847) 746-2084
x3169

MONTH November 1996

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>1046</u>
2	<u>1043</u>
3	<u>1045</u>
4	<u>1045</u>
5	<u>1046</u>
6	<u>1048</u>
7	<u>1048</u>
8	<u>1047</u>
9	<u>1045</u>
10	<u>1048</u>
11	<u>1043</u>
12	<u>1044</u>
13	<u>1044</u>
14	<u>1045</u>
15	<u>1043</u>
16	<u>1046</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>1046</u>
18	<u>1045</u>
19	<u>1042</u>
20	<u>1044</u>
21	<u>1044</u>
22	<u>1045</u>
23	<u>1046</u>
24	<u>1047</u>
25	<u>1043</u>
26	<u>1043</u>
27	<u>1042</u>
28	<u>1043</u>
29	<u>1041</u>
30	<u>1042</u>
31	<u></u>

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.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-304
UNIT Zion Unit 2
DATE 12/13/96
COMPLETED BY J. CYGAN
TELEPHONE (847) 746-2084
x3169

November 1996

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>-11</u>
2	<u>-12</u>
3	<u>-12</u>
4	<u>-12</u>
5	<u>-12</u>
6	<u>-12</u>
7	<u>-12</u>
8	<u>-12</u>
9	<u>-12</u>
10	<u>-12</u>
11	<u>-12</u>
12	<u>-12</u>
13	<u>-12</u>
14	<u>-12</u>
15	<u>-12</u>
16	<u>-12</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>-12</u>
18	<u>-12</u>
19	<u>-12</u>
20	<u>-12</u>
21	<u>-12</u>
22	<u>-12</u>
23	<u>-12</u>
24	<u>-12</u>
25	<u>-12</u>
26	<u>-12</u>
27	<u>-12</u>
28	<u>-12</u>
29	<u>-12</u>
30	<u>-12</u>
31	<u></u>

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.

November 1996

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

Unit 1 began November on-line at 1075 MWe power level (99.4% reactor power). Unit 1 remained on line for the entire reporting period. Unit 1 concluded the reporting period at 1085 MWe power level (99.8% reactor power) and with an availability factor of 100.0% for the month of November.

UNIT 2

Unit 2 began November off-line for a continuation of refueling outage (Z2R14). Unit 2 is scheduled to be back on-line on December 25, 1996.

November 1996

MAJOR MAINTENANCE

EQUIPMENT NAME

WORK PERFORMED

(UNIT 1)

0B FP

Battery # 1 & #2

Completed

OOS: 11/04/96 - 11/05/96

1B CW PP

Replace Exciter Fuses. Clean & Inspect Cabinet

Completed

OOS: 11/19/96 - 11/30/96

1A AFW PP

Surveillance, Valve Lubrication, Inspection

Completed

OOS: 11/22/96 - 11/29/96

1B FW PP

1A Oil Pump Bearing Pressure

Completed

OOS: 11/15/96 - 11/26/96

COMMENT:

November 1996

MAJOR MAINTENANCE

EQUIPMENT NAME

WORK PERFORMED

(UNIT 2)

2B C/CB PP

Perform PM/Change Lubrication
OOS: 07/30/96 - *

2A IA Comp

Compressor Replacement
OOS: 07/14/96 - *

COMMENT: * No return to service date.

REFUELING INFORMATION REQUEST

QUESTIONS:

1. Name of facility.
2. Scheduled date for next refueling shutdown.
3. Scheduled date for restart following refueling.
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

If answer is yes, what, in general, will these be?

If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Ref. 10 CFR Section 50.59)?

If no such review has taken place, when is it scheduled?

5. Scheduled date(s) for submitting proposed licensing action and supporting information.
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures.
7. The number of fuel assemblies: (a) in the core and (b) in the spent fuel storage pool.
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in the number of fuel assemblies.
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.

REFUELING INFORMATION REQUEST

UNIT 1 - ANSWERS:

1. Zion Unit 1.
2. Cycle 15 is scheduled to shutdown April 5, 1997 for refueling.
3. Cycle 16 is scheduled to start up May 25, 1997.
4. The following License Amendments are required to allow resumption of operation after Refueling Outage Z1R15.
 - Increase Steam Generator plugging limit. Required to ensure Unit derating will not be required based on Steam Generator plugging.

The Reload Safety Analysis for cycle 16 will be completed during Z1R15.
5. Projected submittal of License Amendment is January, 1997.
6. Not applicable.
7. The number of fuel assemblies
 - (a) in the core is 193, and
 - (b) in the spent fuel storage pool from Zion Unit 1 is 932.
8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 2) is 3012 fuel assemblies. Of these 3012 storage locations, 11 are unavailable and 239 are inaccessible pending completion of the Offset Tool Modification (M22-90-0-008A, C).
9. The projected date of the last refueling that can be discharged to the spent fuel pool, assuming the present licensed capacity of 3012 locations (11 out of 3012 are unavailable) is April 2006 (from Z1R21) based on the 1996 Projected ComEd Overhaul Schedule. This assumes the Offset Tool Modification (M22-90-0-008A, C) will be installed prior to June 2003. This projected date is subject to change based on outage durations or Overhaul Schedule changes.

REFUELING INFORMATION REQUEST

UNIT 2 - ANSWERS:

1. Zion Unit 2.
2. Cycle 14 is scheduled to shutdown September 19, 1996 for refueling.
3. Cycle 15 is scheduled to start up December 25, 1996.
4. The following outstanding License Amendment Requests are required for startup of Unit 2 following Refueling Outage Z2R14.
 - PTLR Amendment - in NRC review.
5. There are no outstanding proposed License Amendments required for startup from Z2R14.
6. New fuel reloaded into Unit 2 Cycle 15 core will incorporate the following design changes:
 - ✧ Selected standard Integral Fuel Burnable Absorber (IFBA) patterns have been updated following a Westinghouse Core Engineering investigation of peripheral IFBA rod loading within the fuel assembly. The net effect of this change is to achieve the most efficient absorber orientation at Beginning of Life (BOL) and for burnups through 5000 MWD/MTU. These patterns provide self-limiting features that mitigate the extent of DNB propagation. In addition, these IFBA patterns provide significant peaking factor and reactivity holddown benefits.
 - IFBA rods will have a nominal B-10 enrichment loading with a reduction in backfill pressure from 200 to 100 psig. The nominal B-10 loading is 1.77 mg/inch. Rod internal gas pressure has an effect on two of the fuel rod design criteria that are evaluated for the reload: Rod internal pressure and clad stress criteria. The Zion Unit 2 Cycle Specific fuel design analysis has been performed and has demonstrated that the design criteria were met.
7. The number of fuel assemblies
 - (a) in the core is 193 and
 - (b) in the spent fuel storage pool from Zion Unit 2 is 984.
8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 2) is 3012 fuel assemblies. Of these 3012 storage locations, 11 are unavailable and 239 are inaccessible pending completion of the Offset Tool Modification (M22-90-0-008A, C).
9. The projected date of the last refueling that can be discharged to the spent fuel pool, assuming the present licensed capacity of 3012 locations (11 out of 3012 are unavailable) is April 2006 (from Z1R21) based on the 1996 Projected ComEd Overhaul Schedule. This assumes the Offset Tool Modification (M22-90-0-008A, C) will be installed prior to June 2003. This projected date is subject to change based on outage durations or Overhaul Schedule changes.