



Commonwealth Edison


Zion Generating Station
101 Shiloh Blvd.
Zion, Illinois 60099
Telephone 708 / 746-2084

January 13, 1994
ZAD-94-001

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Attached is the December 1993 Operating Status Report.


E. A. Broccolo
Station Manager
Zion Station

TPJ/jlc

Enclosure

cc: Regulatory Assurance
USNRC Document Control
M. Wallace
J. Martin (NRC)
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D. R. Eggett
INPO
Div. of Enforcement Health
State of Illinois
F. Yost
NRC Inspector, Zion
Operating Engrs.
C. Y. Shiraki - Fax
Master File

ZCLERK-5 (1)

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PDR ADOCK 05000295
R PDR

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OPERATING DATA REPORT

DOCKET NO. 50-295
 DATE 01/13/94
 COMPLETED BY J. Cygan
 TELEPHONE (708)746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 120193 to 2400 123193
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	744.0	8,760.0	175,344.0
12. Number Of Hours Reactor Was Critical	0.0	6,987.6	119,420.1
13. Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14. Hours Generator On-Line	0.0	6,967.0	115,923.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	21,839,856.0	338,573,147
17. Gross Electrical Energy Generated (MWH)	0.0	7,295,546.0	109,859,560
18. Net Electrical Energy Generated (MWH)	0.0	7,020,977.0	104,546,571
19. Unit Service Factor	0.0	79.5	66.1
20. Unit Availability Factor	0.0	79.5	66.1
21. Unit Capacity Factor (Using MDC Net)	0.0	77.1	57.3
22. Unit Capacity Factor (Using DER Net)	0.0	77.1	57.3
23. Unit Forced Outage Rate	0.0	0.9	15.9
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: 3/24/94
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 01/13/94
 COMPLETED BY J. Cygan
 TELEPHONE (708)726-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 120193 to 2400 123193
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>8,760.0</u>	<u>169,057.0</u>
12. Number Of Hours Reactor Was Critical	<u>0.0</u>	<u>5,427.4</u>	<u>119,965.1</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>226.1</u>
14. Hours Generator On-Line	<u>0.0</u>	<u>5,427.1</u>	<u>117,006.1</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>0.0</u>	<u>16,437,447.0</u>	<u>347,129,787</u>
17. Gross Electrical Energy Generated (MWH)	<u>0.0</u>	<u>5,513,227.0</u>	<u>111,681,162</u>
18. Net Electrical Energy Generated (MWH)	<u>0.0</u>	<u>5,292,177.0</u>	<u>106,402,841</u>
19. Unit Service Factor	<u>0.0</u>	<u>62.0</u>	<u>69.2</u>
20. Unit Availability Factor	<u>0.0</u>	<u>62.0</u>	<u>69.2</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0.0</u>	<u>58.1</u>	<u>60.5</u>
22. Unit Capacity Factor (Using DER Net)	<u>0.0</u>	<u>58.1</u>	<u>60.5</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>15.0</u>
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: 3/1/94
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 01/13/94
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084 x3169

REPORT MONTH DECEMBER 1993

No.	Date	¹ Type	Duration (Hours)	² Reason	Method of Shutting Down ³ Reactor	Licensee Event Report #	System Code 4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
	12/01	S	744.0	C	1				Continuation of Refueling & Service Water Outage

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 01/13/94
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084 x3169

REPORT MONTH DECEMBER 1993

No.	Date	1 Type	Duration (Hours)	2 Reason	Method of Shutting Down 3 Reactor	Licensee Event Report #	System Code 4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
	12/01	S	744.0	F	1				Continuation of Service Water Outage

- 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 01/13/94
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084
x3169

MONTH DECEMBER 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>-9</u>
2	<u>-9</u>
3	<u>-9</u>
4	<u>-3</u>
5	<u>-3</u>
6	<u>-3</u>
7	<u>-3</u>
8	<u>-3</u>
9	<u>-3</u>
10	<u>-3</u>
11	<u>-2</u>
12	<u>-2</u>
13	<u>-2</u>
14	<u>-2</u>
15	<u>-2</u>
16	<u>-2</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>-3</u>
18	<u>-3</u>
19	<u>-3</u>
20	<u>-3</u>
21	<u>-3</u>
22	<u>-3</u>
23	<u>-3</u>
24	<u>-3</u>
25	<u>-3</u>
26	<u>-3</u>
27	<u>-3</u>
28	<u>-3</u>
29	<u>-3</u>
30	<u>-3</u>
31	<u>-3</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 01/13/94
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084
x3169

MONTH DECEMBER 1993

DAY	AVERAGE DAILY POWER LEVEL (Mwe-Net)
1	<u>-8</u>
2	<u>-8</u>
3	<u>-8</u>
4	<u>-3</u>
5	<u>-3</u>
6	<u>-3</u>
7	<u>-3</u>
8	<u>-3</u>
9	<u>-3</u>
10	<u>-3</u>
11	<u>-2</u>
12	<u>-2</u>
13	<u>-2</u>
14	<u>-2</u>
15	<u>-2</u>
16	<u>-2</u>

DAY	AVERAGE DAILY POWER LEVEL (Mwe-Net)
17	<u>-2</u>
18	<u>-2</u>
19	<u>-2</u>
20	<u>-2</u>
21	<u>-2</u>
22	<u>-2</u>
23	<u>-2</u>
24	<u>-2</u>
25	<u>-2</u>
26	<u>-2</u>
27	<u>-2</u>
28	<u>-2</u>
29	<u>-2</u>
30	<u>-2</u>
31	<u>-2</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.

DECEMBER 1993

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

Unit 1 began and ended December Off-Line for Refueling and Dual Outage work on Service Water and Component Cooling Systems.

UNIT 2

Unit 2 began and ended December Off-Line for Dual Outage work on Service Water and Component Cooling Systems.

DECEMBER 1993

MAJOR MAINTENANCE

<u>EQUIPMENT NAME</u>	<u>WORK PERFORMED</u>
(UNIT 1)	
SW	Major SW System Work Scheduled Outage OOS: 11/05/93 - 01/25/94
CC	Major CC System Work Scheduled Outage OOS: 11/05/93 - 01/24/94
0 D/G	Overhaul Scheduled Overhaul OOS: 10/24/93 - 01/27/94
1A D/G	Overhaul Scheduled Overhaul OOS: 11/11/93 - 01/29/94
1A RCP	Seal Inspection Scheduled Inspection/Replacement OOS: 11/04/93 - 01/15/94
1B RCP	Pump & Motor Work Scheduled Work OOS: 11/04/93 - 01/10/94
MOVs	MOV Overhaul & Test Scheduled Work OOS: 10/11/93 - 02/15/94

COMMENT: UI Refueling and Dual Outage Work

DECEMBER 1993

MAJOR MAINTENANCE

EQUIPMENT NAME

WORK PERFORMED

(UNIT 2)

SW

Major SW System Work
Scheduled Outage
OOS: 11/05/93 - 01/25/94

CC

Major CC System Work
Scheduled Outage
OOS: 11/05/93 - 01/24/94

0 D/G

Overhaul
Scheduled Overhaul
OOS: 10/24/93 - 01/27/94

2A D/G

Overhaul
Scheduled Overhaul
OOS: 10/14/93 - 01/11/94

MOV's

MOV Overhaul & Test
Scheduled Work
OOS: 10/11/93 - 02/15/94

COMMENT: U2 Dual Outage Work

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 13 was shutdown October 21, 1993 for refueling.
3. Cycle 14 is scheduled to start up March 24, 1994.
4. Yes, Neutron Flux - NIS Instrumentation unit change per Gamma Metrics Mod. Onsite Review completed 4/8/93, submitted 4/21/93, approval was received on 10/29/93.
5. Not applicable or none proposed.
6. Not applicable.
7. The number of fuel assemblies
 - (a) in the core is 0, and
 - (b) in the spent fuel storage pool from Zion Unit 1 is 977.
8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 2) is 3012 fuel assemblies (only 2762 locations will be accessible).
9. Zion Station will lose dual full core discharge capability in November 2001, at the beginning of Unit 1 Cycle 19, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in May 2003, at the beginning of Unit 1 Cycle 20.

REFUELING INFORMATION REQUEST

UNIT 2 - ANSWERS:

1. Zion Unit 2.
2. Cycle 13 is scheduled to shutdown January 5, 1995 for refueling.
3. Cycle 14 is scheduled to start up March 22, 1995.
4. Yes. Neutron Flux - NIS Instrumentation unit change per Gamma Metrics Mod. Onsite Review completed 4/8/93, submitted 4/21/93, approval was received on 10/29/93.
5. Not applicable or none proposed.
6. Not applicable.
7. The number of fuel assemblies
 - (a) in the core is 0, and
 - (b) in the spent fuel storage pool from Zion Unit 2 is 1,017.
8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 1) is 3012 fuel assemblies (only 2762 locations will be accessible).
9. Zion Station will lose dual full core discharge capability in November 2001, at the beginning of Unit 1 Cycle 19, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in May 2003, at the beginning of Unit 1 Cycle 20.