



Commonwealth Edison

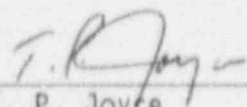
Zion Generating Station
101 Shiloh Blvd.
Zion, Illinois 60099
Telephone 708 / 746-2084

February 10, 1993
ZAD-93-002

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Attached is the January 1993 Operating Status Report.


T. P. Joyce
Station Manager
Zion Station

TPJ/jlc

Enclosure

cc: Regulatory Assurance
USNRC Document Control
M. Wallace
A. B. Davis (NRC)
J. Leider
T. Rieck
T. J. Kovach
D. R. Eggett
INPO
Div. of Eng. Health
State of Illinois
F. Yost
B. Gallo
H. Granjean
NRC Inspector, Zion
P. Graessle
Operating Engrs.
C. Patel - Fax
Master File

18-126

ZCLERK-5(1)

9302180253 930131
PDR ADDCK 05000295
R PDR

JE24, 1

OPERATING DATA REPORT

DOCKET NO. 50-295
 DATE 02/10/93
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084
 X3169

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 930101 to 2400 930131
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	744.0	167,328.0
12. Number Of Hours Reactor Was Critical	744.0	744.0	113,176.5
13. Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14. Hours Generator On-Line	744.0	744.0	109,700.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2,321,845	2,321,845	319,055,136
17. Gross Electrical Energy Generated (MWH)	780,314	780,314	103,344,328
18. Net Electrical Energy Generated (MWH)	758,073	758,073	98,283,667
19. Unit Service Factor	100.0	100.0	65.5
20. Unit Availability Factor	100.0	100.0	65.5
21. Unit Capacity Factor (Using MDC Net)	97.9	97.9	56.4
22. Unit Capacity Factor (Using DER Net)	97.9	97.9	56.4
23. Unit Forced Outage Rate	0.0	0.0	16.6
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:
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 02/10/93
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084
x3169

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 930101 to 2400 930131
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>744.0</u>	<u>744.0</u>	<u>161,041.0</u>
12. Number Of Hours Reactor Was Critical	<u>0.0</u>	<u>0.0</u>	<u>114,537.7</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>0.0</u>	<u>111,579.0</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>0.0</u>	<u>330,692,340</u>
17. Gross Electrical Energy Generated (MWH)	<u>0.0</u>	<u>0.0</u>	<u>106,167,935</u>
18. Net Electrical Energy Generated (MWH)	<u>0.0</u>	<u>0.0</u>	<u>101,110,664</u>
19. Unit Service Factor	<u>0.0</u>	<u>0.0</u>	<u>69.2</u>
20. Unit Availability Factor	<u>0.0</u>	<u>0.0</u>	<u>69.2</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0.0</u>	<u>0.0</u>	<u>60.3</u>
22. Unit Capacity Factor (Using DER Net)	<u>0.0</u>	<u>0.0</u>	<u>60.3</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>15.5</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			
<u>Z2R12 - Refueling 11/12/92 - 02/25/93</u>			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 02/25/92
 26. Units In Test Status (Prior to Commercial Operation):
- | | Forecast | Achieved |
|----------------------|-------------------|-------------------|
| INITIAL CRITICALITY | <u> </u> | <u> </u> |
| INITIAL ELECTRICITY | <u> </u> | <u> </u> |
| COMMERCIAL OPERATION | <u> </u> | <u> </u> |

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-295

UNIT NAME Zion Unit 1

DATE 02/10/93

COMPLETED BY J. Cygan

TELEPHONE (708) 746-2084 x3169

REPORT MONTH January 1993

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
	01/04/93	F	2	A	5				At 1530 GSEP was declared. 1B SI Pp OOS & 1A Chg Pp became inoperable due to high vibration on speed changer. Started power reduction. At 1740 power reduction stopped. Waiver from NRC for 24 hrs. received. Ramped unit to normal power. Normal power operation for duration of month.

1

F: Forced
S: Scheduled

2

Reason:
A-Equipment Failure (Explain)
B-Maintenance of 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 2DATE 02/10/93COMPLETED BY J. CyganTELEPHONE (708) 746-2084 x3169REPORT MONTH January 1993

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
	01/01/93	S	744.00	C					Continuation of Refueling Outage

1

F: Forced
S: Scheduled

2

Reason:

A-Equipment Failure (Explain)

B-Maintenance of 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 I - Same Source

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-295
 UNIT Zion Unit 1
 DATE 02/10/93
 COMPLETED BY J. Cygan
 TELEPHONE (708) 746-2084
 x3169

MONTH January 1993

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

1	1,019
2	1,030
3	988
4	797
5	860
6	1,011
7	1,055
8	1,054
9	1,054
10	1,046
11	1,054
12	1,050
13	1,053
14	1,047
15	1,017
16	1,030

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

17	1,028
18	1,057
19	1,058
20	1,019
21	1,022
22	1,041
23	1,006
24	945
25	1,029
26	1,037
27	1,030
28	989
29	1,057
30	1,053
31	1,052

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 02/10/93

COMPLETED BY J. Cygan

TELEPHONE (708) 746-2084

x3169

MONTH January 1993

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

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

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	-12
18	-12
19	-11
20	-12
21	-12
22	-11
23	-12
24	-12
25	-12
26	-12
27	-12
28	-12
29	-11
30	-12
31	-12

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.

January 1993

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

Unit 1, began January at 1089 MWe power level (99.4% reactor power). On January 4, 1993 at 1530 a GSEP was declared, 1B SI Pump was OOS and 1A Charging Pump became inoperable due to high vibration on speed changer, power reduction was started.

At 1740 power reduction was stopped. A waiver was received from the NRC for 24 hours. Unit 1 was at 385 Mwe and starting power increase to normal power per load dispatcher directions.

Normal power operation for duration of month. The Unit concluded the reporting period at 1097 MWe power level (99.5% reactor power).

UNIT 2

Unit 2, began January in a Refueling Outage, Mode 6 and stayed in Mode 6 until January 22, 1993 when the Mode changed to CSD Mode 5. Refueling Outage continues with projected on line date of February 25, 1993.

January 1993
MAJOR SAFETY RELATED MAINTENANCE

<u>Equipment Name</u> (UNIT 1)	<u>Work Performed</u>
0A CC Pump	Rotor Axial Movement: Work Completed OOS: Continued - 1/1/93
"0" Pp Air Comp	Inspect/Clean Cooler: Work Completed OOS: Continue - 1/24/93
0A Fire Pump	Sheared Sensing Line: Repair Completed & Oil Changed OOS: Continue - 1/7/93
0B CC Pump	Oil Change - PM Work: Oil Changed OOS: 1/4/93 - 1/4/93
1B ST Pump	Recirc Line Check Valve Repair: Work Completed OOS: 1/3/93 - 1/5/93
1A Chg Pump	High Vibes on Speed Changer: Vibration Found Acceptable OOS: 1/4/93 - 1/7/93
1A D/G	Water in Oil: Water Leak Repaired OOS: 1/10/93 - 1/12/93
1C CD/CDB Pp	Clean Strainer: Strainer Cleaned OOS: 1/13/93 - 1/13/93
1C FW Pump	LoveJoy Contr. Calibration: Calibrated LoveJoy System OOS: 1/15/93 - 1/15/93
1C CW Pump	Upper Bearing Motor Sightglass: Sightglass Leaks Repaired OOS: 1/21/93 - 1/21/93
0D CC Pump	Replace Carbon Steel Cooling Lines: Work Cooling Lines OOS: 1/21/93 - 1/24/93
#1 Pp Air Comp	Failed to Start Locally: Cooler Leak Repaired OOS: 1/24/93 - *
#2 Pp Air Comp	Does Not Stop When Pressurized: Sensing Lines Cleaned Up OOS: 1/24/93 - 1/24/93
2A 1A Comp	Tripping On Vibration: Adjusted Vib Trip Sensor OOS: 1/22/93 - 1/25/93

COMMENT:

* During the Maintenance Run the Compressor Ran Hot - Investigating

ZCLERK-5(9)

January 1993

MAJOR SAFETY RELATED MAINTENANCE

Equipment Name

Work Performed

(UNIT 2)

REFUELING OUTAGE

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 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.

Unit 1 - Answers

1. Zion Unit 1
2. Cycle 13 is scheduled to shutdown September 9, 1993 for refueling.
3. Cycle 14 is scheduled to start up February 7, 1994.
4. No Technical Specification changes are planned for Z1C14 so far.
5. Not applicable or none proposed.
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 784.
8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 2) is 2112 fuel assemblies. Plans are being developed to rerack the Spent Fuel Pool to increase storage capacity to 3012 assemblies.
9. Zion Station will lose dual full core discharge capability in February 1994, at the beginning of Unit 1 Cycle 14, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in February 1996, at the beginning of Unit 2 Cycle 15.

Unit 2 - Answers

1. Zion Unit 2
2. Cycle 12 was Shutdown November 12, 1992 for refueling.
3. Cycle 13 is scheduled to start up February 20, 1993.
4. Yes. Technical Specification changes have been made to include the Westinghouse VANTAGE fuel design being loaded for Z2C13, and effects of the vessel fluency reduction program beginning with Z2C13.

A Tech Spec change has also been made that will allow CECO to use a CORE OPERATING LIMITS REPORT (COLR) in place of some existing Tech Spec Limits.
5. License amendments for the Z2C13 reload were submitted in Summer 1991, and were approved July 26, 1992 Amendment 128.
6. License considerations associated with the Z2C13 reload include the new VANTAGE fuel design, and the new LOCA analysis with higher core power peaking factors required for the low-low-leakage loading pattern used in Z2C13.
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 840.
8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 1) is 2112 fuel assemblies. Plans are being developed to rerack the Spent Fuel Pool to increase storage capacity to 3012 assemblies.
9. Zion Station will lose dual full core discharge capability in February 1994, at the beginning of Unit 1 Cycle 14, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in February 1996, at the beginning of Unit 2 Cycle 15.

ADDENDUM TO ZION STATION MONTHLY REPORT

Special Report submitted in accordance with Zion Tech Spec. Surv. 4.15.1.B.5

This report addresses one valid failure of the 0 EDG. The criteria to determine valid tests is in accordance with section C.2.e of Reg. Guide 1.108.

On January 10, 1993 the 1A EDG was declared inoperable due to a high concentration of water in the lube oil. Investigation revealed that jacket water was entering the lube oil through a cylinder head stud hole. The cylinder head was replaced and the EDG was declared operable following the successful performance of PT-11. As of January 31, 1993 this was the 6th valid failure in the last 100 valid unit demands for Unit 1. This failure was determined to be valid per Reg. Guide 1.108 C.2.e.

The test frequency for 1A EDG changed to 7 days.