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

April 14,1994
ZAD-94-004

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Attached is the March 1994 Operating Status Report.

E.A. Broccolo

E. A. Broccolo
Station Manager
Zion Station

EAB/jlc

Enclosure

cc: Regulatory Assurance
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Master File

ZCLERK-5 (1)

IE24
1/1

OPERATING DATA REPORT

DOCKET NO. 50-295
DATE 04/14/94
COMPLETED BY J. Cygan
TELEPHONE (708)746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 030194 to 2400 033194
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	2,160.0	177,504.0
12.	Number Of Hours Reactor Was Critical	0.0	0.0	119,420.1
13.	Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14.	Hours Generator On-Line	0.0	0.0	115,923.1
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	0.0	0.0	338,573,147
17.	Gross Electrical Energy Generated(MWH)	0.0	0.0	109,859,560
18.	Net Electrical Energy Generated (MWH)	0.0	0.0	104,546,571
19.	Unit Service Factor	0.0	0.0	65.3
20.	Unit Availability Factor	0.0	0.0	65.3
21.	Unit Capacity Factor (Using MDC Net)	0.0	0.0	56.6
22.	Unit Capacity Factor (Using DER Net)	0.0	0.0	56.6
23.	Unit Forced Outage Rate	0.0	0.0	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: 5/20/94
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 04/14/94
COMPLETED BY J. Cygan
TELEPHONE (708)746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 030194 to 2400 033194
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	2,160.0	171,217.0
12.	Number Of Hours Reactor Was Critical	0.0	0.0	119,965.1
13.	Reactor Reserve Shutdown Hours	0.0	0.0	226.1
14.	Hours Generator On-Line	0.0	0.0	117,006.1
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	0.0	0.0	347,129,787
17.	Gross Electrical Energy Generated(MWH)	0.0	0.0	111,681,162
18.	Net Electrical Energy Generated (MWH)	0.0	0.0	106,402,841
19.	Unit Service Factor	0.0	0.0	68.3
20.	Unit Availability Factor	0.0	0.0	68.3
21.	Unit Capacity Factor (Using MDC Net)	0.0	0.0	59.8
22.	Unit Capacity Factor (Using DER Net)	0.0	0.0	59.8
23.	Unit Forced Outage Rate	0.0	0.0	15.0

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: 4/17/94
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 04/14/94
COMPLETED BY J. Cygan
TELEPHONE (708) 746-2084 x3169

REPORT MONTH MARCH 1994

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
	03/01	S	744.0	C	1				Continuation of Refueling & Dual Outage Work on Service Water & Component Cooling Systems

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

ZCLERK-5 (4)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-304
UNIT NAME Zion Unit 2
DATE 04/14/94
COMPLETED BY J. Cygan
TELEPHONE (708) 746-2084 x3169

REPORT MONTH MARCH 1994

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
	03/01	S	744.0	F	1				Continuation of Dual Outage Work on Service Water & Component Cooling Systems

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 04/14/94
COMPLETED BY J. Cygan
TELEPHONE (708) 746-2084
x3169

MONTH MARCH 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-7	17	-18
2	-9	18	-22
3	-11	19	-23
4	-18	20	-23
5	-18	21	-22
6	-17	22	-21
7	-18	23	-21
8	-17	24	-21
9	-17	25	-21
10	-17	26	-23
11	-14	27	-27
12	-14	28	-26
13	-14	29	-27
14	-14	30	-27
15	-14	31	-31
16	-15		

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 04/14/94
COMPLETED BY J. Cygan
TELEPHONE (708) 746-2084
x3169

MONTH MARCH 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-7	17	-17
2	-9	18	-22
3	-11	19	-23
4	-18	20	-22
5	-17	21	-22
6	-16	22	-21
7	-17	23	-20
8	-17	24	-21
9	-17	25	-20
10	-16	26	-22
11	-13	27	-27
12	-13	28	-26
13	-13	29	-27
14	-13	30	-27
15	-13	31	-30
16	-14		

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.

MARCH 1994

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

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

1057 on March 20, 1994 Unit 1 entered Mode 4 after completion of Refueling and Dual Outage work on Service Water and Component Cooling Systems.

0550 on March 22, 1994 Unit 1 entered Mode 3 and stayed in Mode 3 thru March 31, 1994.

UNIT 2

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

0254 on March 5, 1994 Unit 2 entered mode 4 after completion of Dual Outage work on Service Water and Component Cooling Systems.

2047 on March 5, 1994 Unit 2 entered Mode 3.

1115 on March 8, 1994 while initiating blowdown, 2RE-0019 alarmed on high rad, and blowdown was isolated. It was discovered that 2D steam generator had approximately 1.13 gpm primary/secondary leak. Entered AOP 1.2, isolated 2D steam generator and started cooldown.

0130 on March 9, 1994 Unit 2 was back in Mode 4.
1222 Unit 2 was in Mode 5/cold shut down, to repair 2D steam generator leak.

0209 on March 30, 1994 entered Mode 4 after 2D steam generator tube leak repaired.

1035 on March 31, 1994 entered Mode 3 - heat up to full temperature and pressure.

MARCH 1994

MAJOR MAINTENANCE

EQUIPMENT NAME	WORK PERFORMED
(UNIT 1)	
1B RHR Pp	Repair leaking seal Pp repaired OOS: 03/08/93 - 03/11/94

COMMENT: Completing miscellaneous maintenance to start up Unit 1.

MARCH 1994

MAJOR MAINTENANCE

EQUIPMENT NAME	WORK PERFORMED
(UNIT 2)	
2D Stm Gen	Prim/Sec Tube Leak Leak Repaired OOS: 03/08/94 - 03/__/94

COMMENT: Completing miscellaneous maintenance to start up Unit 2.

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 May 19, 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 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 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 193, and
   (b) in the spent fuel storage pool from Zion Unit 2 is 824.

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.

ADDENDUM TO ZION STATION MONTHLY REPORT

Special report submitted in accordance with Zion Tech. Spec. Surv. 4.15.B.5

This report addresses one valid failure of the 2B EDG and 2 invalid failures of the 1A EDG. The criteria to determine valid tests are in accordance with section C.2.e of Reg. Guide 1.108.

On March 7, 1994 at 0619 the 2B EDG was observed, during TSS 15.6.43-2 (Endurance Testing of Diesel Generators During Refueling), to be operating with elevated jacket water and lube oil temperatures. Troubleshooting revealed that the lube oil and jacket water heat exchangers were fouled, on the service water side, with Zebra Mussel debris. The EDG was returned to service at 1035 on March 9 following a successful PT-11. This failure was determined to be valid per R.G. 1.108. The 2B EDG was unavailable for approximately 52 hours during the course of this event. The test frequency for the 2B EDG remains at 31 days. As of March 7 this was the 2nd valid failure in the last 100 valid Unit 2 demands.

On March 14, 1994 at 1708 the 1A EDG was secured during TSS 15.6.35-1 (Manual Actuation of the Safety Injection and Safe Shutdown Systems and Diesel Generator Loading Test). The EDG was secured by the local operator who thought that he heard unusual noises emanating from the engine. Extensive troubleshooting failed to repeat/identify the noises. The 1A EDG was returned to service at 0211 on March 16, 1994. The 1A EDG was unavailable for approximately 28 hours during the course of the event. This failure was determined to be invalid per R.G. 1.108, C.2.e.2. The test frequency for the 1A EDG remained at 31 days.

On March 24, 1994 at 1142 the 1A EDG tripped during TSS 15.6.35-1 (Manual Actuation of the Safety Injection and Safe Shutdown Systems and Diesel Generator Loading Test). Troubleshooting revealed that high lube oil level in the crankcase caused a spurious actuation of the #3 connecting rod bearing temperature trip device. The high lube oil level was caused by faulty level indication resulting in the unnecessary addition of oil. The oil level was lowered and the trip device was reset prior to returning the EDG to service on March 25 at 0102. The 1A EDG was unavailable for approximately 15 hours during the course of this event. This failure was determined to be invalid per R.G. 1.108, C.2.e.2. The test frequency for the 1A EDG remained at 31 days.