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

August 11, 1994
ZAD-94-008

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Attached is the July 1994 Operating Status Report.

DB Wozniak fm/

E. A. Broccolo
Station Manager
Zion Station

EAB/jlc

Enclosure

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

190094

IE24
1/1

ZCLERK-(1)

OPERATING DATA REPORT

DOCKET NO. 50-295
DATE 08/11/94
COMPLETED BY J. CYGAN
TELEPHONE (708)746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 070194 to 2400 073194
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	5,087.0	180,431.0
12.	Number Of Hours Reactor Was Critical	402.1	852.7	120,288.3
13.	Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14.	Hours Generator On-Line	402.1	801.2	116,724.3
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,258,809.0	2,187,451.0	340,760,598
17.	Gross Electrical Energy Generated(MWH)	419,728.0	716,301.0	110,575,861
18.	Net Electrical Energy Generated (MWH)	399,912.0	678,288.0	105,224,859
19.	Unit Service Factor	54.0	15.7	64.7
20.	Unit Availability Factor	54.0	15.7	64.7
21.	Unit Capacity Factor (Using MDC Net)	51.7	12.8	56.1
22.	Unit Capacity Factor (Using DER Net)	51.7	12.8	56.1
23.	Unit Forced Outage Rate	46.0	72.6	17.1

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 08/11/94
COMPLETED BY J. CYGAN
TELEPHONE (708)746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 070194 to 2400 073194
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	5,087.0	174,144.0
12.	Number Of Hours Reactor Was Critical	744.0	2,545.8	122,510.9
13.	Reactor Reserve Shutdown Hours	0.0	0.0	226.1
14.	Hours Generator On-Line	744.0	2,519.5	119,525.6
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	2,404,613.0	8,012,871.0	355,142,658
17.	Gross Electrical Energy Generated(MWH)	806,684.0	2,685,845.0	114,367,007
18.	Net Electrical Energy Generated (MWH)	773,611.0	2,567,970.0	108,970,811
19.	Unit Service Factor	100.0	49.5	68.6
20.	Unit Availability Factor	100.0	49.5	68.6
21.	Unit Capacity Factor (Using MDC Net)	100.0	48.5	60.2
22.	Unit Capacity Factor (Using DER Net)	100.0	48.5	60.2
23.	Unit Forced Outage Rate	0.0	0.0	14.7

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

Refueling Outage Starting 1/5/95 Duration 70 days

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		

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-295
UNIT NAME Zion Unit 1
DATE 08/11/94
COMPLETED BY J. CYGAN
TELEPHONE (708) 746-2084 x3169

REPORT MONTH JULY 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
	07/02	F	341.9	A	3	94-010			U1 Generator Trip/ Turbine Trip/Rx Trip. Fire Under Main Generator Bus Ducts.

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-(4)

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-304
UNIT NAME Zion Unit 2
DATE 08/11/94
COMPLETED BY J. CYGAN
TELEPHONE (708) 746-2084 x3169

REPORT MONTH JULY 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
									On line for the entire reporting period.

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)

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-295
UNIT Zion Unit 1
DATE 08/11/94
COMPLETED BY J. CYGAN
TELEPHONE (708) 746-2084
x3169

MONTH JULY 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1037	17	663
2	507	18	1031
3	-13	19	1038
4	-13	20	1047
5	-13	21	1048
6	-13	22	1048
7	-13	23	1048
8	-13	24	1037
9	-13	25	1039
10	-13	26	1046
11	-13	27	1047
12	-13	28	1045
13	-13	29	1047
14	-13	30	1045
15	-13	31	1039
16	22		

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 08/11/94
COMPLETED BY J. CYGAN
TELEPHONE (708) 746-2084
x3169

MONTH JULY 1994

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1049	17	1049
2	1043	18	1026
3	1041	19	1048
4	1037	20	1048
5	1040	21	1048
6	1040	22	1048
7	1042	23	1044
8	1043	24	1040
9	1030	25	1047
10	1030	26	1051
11	987	27	1049
12	1033	28	1030
13	1035	29	1050
14	1036	30	1051
15	1034	31	1051
16	1035		

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.

JULY 1994

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

Unit 1 began July on-line at 1080 MWe power level (99.5% reactor power).

On 7/2/94 at 1208 Turbine Tripped, Rx Tripped at 82% power. This was due to a bus duct fire under the main generator.

On 7/16/94 at 1802 Unit 1 went on-line.

Unit 1 concluded the reporting period at 1087 MWe power level (100% reactor power).

UNIT 2

Unit 2 began July on-line at 1088 MWe power level (99.7% reactor power).

Unit 2 remained on-line for the entire month of July.

Unit 2 concluded the reporting period at 1093 MWe power level (100% reactor power).

JULY 1994

MAJOR MAINTENANCE

EQUIPMENT NAME	WORK PERFORMED
(UNIT 1)	
1C HD Pp	Major Overhaul Pp Overhauled OOS: 06/12/94 - 07/23/94
1B CW Pp	Major Overhaul PP Overhauled OOS: 04/04/94 - 07/22/94
1B SW Pp	Major Overhaul Pp Overhauled OOS: 04/04/94 - 07/22/94
1B RHR Pp	Casing Leak/1FCV-RH611 Pp Repaired OOS: 07/03/94 - *
1B SI Pp	Low Recirc Flow. Orifice Examination & Cleaning OOS: 07/10/94 - 07/12/94
1A D/G	Parts Question Needing Inspection Inspection of Speed Control Shaft OOS: 07/13/94 - 07/15/94
0D CC Pp	Planned Maintenance Lube & Discharge Pressure Indicator Isolation Valve Replacement OOS: 07/12/94 - 07/16/94
0E CC Pp	Breaker Mod. Inspection & Lube Breaker Mod. Inspection & Lube OOS: 07/18/94 - 07/21/94
0B 1A Comp	IA Dryer 0B 1A Comp Window OOS: 07/19/94 - 07/25/94

COMMENT: * No date estimated

ZCLERK-(9)

JULY 1994

MAJOR MAINTENANCE

EQUIPMENT NAME	WORK PERFORMED
(UNIT 2)	
2A D/G	Repair Replace Speed Gear Shaft OOS: 07/12/94 - 07/13/94
2B D/G	JW Leak JW Leak Repairs OOS: 07/20/94 - 07/22/94
2B HD Pp	Pp & Recirc Repaired OOS: 07/05/94 - 07/26/94
2B D/G	L/O Drain Line Leaks L/O Drain Line Leaks Repaired OOS: 07/29/94 - 07/29/94

COMMENT:

ZCLERK-(10)

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 14 is scheduled to shutdown September 7, 1995 for refueling.

3. Cycle 15 is scheduled to start up November 16, 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 1 is 860.

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

On July 12, 1994, at 1118 while running for PT-11-DG2A (Diesel Generator 2A Loading Test), the 2A EDG tripped. Troubleshooting revealed that the shaft supporting a target gear, for the speed sensing magnetic pickup, had broken resulting in the loss of the required engine speed signal. The shaft was replaced. The failed shaft was found to have a defect that resulted in an overstressed condition during initial assembly ultimately resulting in total fracture. The same shaft is installed in the 1A EDG and the 0 EDG at Zion Station. The 1A EDG shaft was inspected on July 15, 1994 with no overstressed condition identified. The 0 EDG shaft will be inspected on August 8, 1994. The 2A EDG was returned to service at 0321 on July 13, 1994 following a successful PT-11-DG2A. This failure was determined to be valid per R.G. 1.108. The 2A EDG was unavailable for approximately 13 hours during the course of this event. The test frequency for the 2A EDG remains at 30 days. As of July 13, 1994 this was the 6th valid failure in the last 100 valid Unit 2 demands.

On July 15, 1994, at 0615 the 1A EDG tripped while running for a maintenance run following inspection of the speed signal target gear shaft. Investigation revealed that the speed sensing magnetic pickup had failed due to an incorrect clearance gap setting during the inspection. The magnetic pickup was replaced and correctly adjusted. The 1A EDG was returned to service on July 16, 1994. The 1A EDG was unavailable for approximately 49 hours during the course of this event. The test frequency for the 1A EDG remains at 30 days. As of July 15, 1994 this was the 1st invalid failure in the last 100 valid Unit 1 demands.