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

August 14, 1990
Z6D-90-016

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Enclosed please find the Operating Status Report for the month of July, 1990 for Zion Generating Station.

T.P. Joyce
Station Manager
Zion Station

TPJ/JT/jl

Enclosure

cc: T. Maiman
A. F. Davis (NRC)
J. Leider
M. S. Turbak
W. Naughton
T. J. Kovach
D. R. Eggett
INPO
Div. of Eng. Health
State of Illinois
Tech Staff File
Director, Office of Inspection
and Enforcement
Master File

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IE24

OPERATING DATA REPORT

DOCKET NO 50-295
DATE 8/6/90
COMPLETED BY J. Thomas
TELEPHONE (708) 746-2084

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 900701 to 2400 900731
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

Notes

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

	This Month	Yr-to-Date	Cumulative
11. Hours In Reporting Period	744.0	5,087.0	145,367.0
12. Number Of Hours Reactor Was Critical	744.0	2,280.7	100,358.3
13. Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14. Hours Generator On-Line	744.0	1,970.8	97,270.5
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2,220,644	5,818,592	282,340,661
17. Gross Electrical Energy Generated(MWH)	748,535	1,963,913	91,036,722
18. Net Electrical Energy Generated (MWH)	709,600	1,849,168	86,556,032
19. Unit Service Factor	100.0	38.7	66.9
20. Unit Availability Factor	100.0	38.7	66.9
21. Unit Capacity Factor (Using MDC Net)	91.7	35.0	57.3
22. Unit Capacity Factor (Using DER Net)	91.7	35.0	57.3
23. Unit Forced Outage Rate	0.0	56.1	14.5

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 8/6/90
COMPLETED BY J. Thomas
TELEPHONE (708) 746-2084

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 900701 to 2400 900731
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

Notes

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

	This Month	Yr-to-Date	Cumulative
11. Hours In Reporting Period	744.0	5,087.0	139,080.0
12. Number Of Hours Reactor Was Critical	0.0	1,410.7	101,521.7
13. Reactor Reserve Shutdown Hours	0.0	0.0	226.1
14. Hours Generator On-Line	0.0	1,395.7	98,832.7
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	4,085,204	293,554,851
17. Gross Electrical Energy Generated(MWH)	0.0	1,365,554	93,771,319
18. Net Electrical Energy Generated (MWH)	0.0	1,283,395	89,250,685
19. Unit Service Factor	0.0	27.4	71.1
20. Unit Availability Factor	0.0	27.4	71.1
21. Unit Capacity Factor (Using MDC Net)	0.0	24.3	61.7
22. Unit Capacity Factor (Using DER Net)	0.0	24.3	61.7
23. Unit Forced Outage Rate	0.0	27.3	14.5

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling outage began on March 22, 1990, approximate start-up is August 13, 1990.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: _____

26. Units In Test Status (Prior to Commerical Operation):

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

JULY

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

The Unit entered the reporting period at a power level of 1088 MWe (99% reactor power). The Unit remained on line the entire report period ending at a Power level of 1060 MWe (96% reactor power) and having an availability factor of 100.0%.

UNIT 2

The unit entered the report period in a refueling outage. The unit was in cold shutdown at the end of the reporting period.

JULY

MAJOR SAFETY RELATED MAINTENANCE

Equipment Name	Work Performed
(UNIT 1)	
Isolation Valve Sealwater Flow Control Valve 1FCV-IW14	Internals repair due to leakage.
1C Containment Spray Pump	Relay replacement due to failure to start from Battery #2.
(UNIT 2)	
Containment Electrical Penetration E-31	The Penetration was replaced following a short that developed on 7/15/90 during efforts to repair a nitrogen leak on the penetration using epoxy. This electrical penetration is associated with the cabling for 2D Reactor Coolant Pump.
2C Containment Spray Pump	The overspeed switch, battery switching relay, and the batteries for 2C Containment Spray Pump were replaced.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-295
UNIT NAME Zion Unit 1
DATE 08/06/90
COMPLETED BY J. Thomas
TELEPHONE (708) 746-2084

REPORT MONTH July

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Evert Report #	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
									Unit 1 remained on-line for the entire month. There were no Shutdowns or Power Reductions.

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 Scram
3-Auto Scram
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 8/06/90
COMPLETED BY J. Thomas
TELEPHONE (708) 746-2084

REPORT MONTH July

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
1	900321	S	744.0	C	4				Continued 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 Scram
3-Auto Scram
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

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-295
UNIT Zion Unit 1
DATE 8/06/90
COMPLETED BY J. Thomas
TELEPHONE (708) 746-2084

MONTH July

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	908	17	1023
2	958	18	1010
3	929	19	1011
4	1033	20	1023
5	1011	21	992
6	915	22	847
7	896	23	907
8	969	24	940
9	999	25	979
10	1009	26	902
11	944	27	927
12	959	28	964
13	933	29	888
14	994	30	877
15	979	31	845
16	990		

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 8/06/90
COMPLETED BY J. Thomas
TELEPHONE (708) 746-2084

MONTH July

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

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.

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 12 is scheduled to shutdown September 2, 1991 for refueling.

3. Cycle 13 is scheduled to start up November 11, 1991.

4. Yes. Technical Specification changes will be required to include the Westinghouse VANTAGE fuel design being loaded for Z1C13, and effects of the vessel fluence reduction program beginning with Z1C13.

5. License amendments for the Z1C13 reload are expected to be submitted in the Fall of 1990.

6. License considerations associated with the Z1C13 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 Z1C13.

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 708.

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 3137 assemblies.

9. Zion Station will lose full core discharge capability (for both units) in May 1993, at the end of Unit 2 Cycle 13, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in November, 1994, at the end of Unit 2 Cycle 14.

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Unit 2 - Answers

1. Zion Unit 2

2. Cycle 11 officially entered refueling on March 22, 1990.

3. Cycle 12 is scheduled to start up August 13, 1990.

4. The reload safety evaluation (RSE) meeting for Z2C12 was held on December 12, 1989, and concluded no license amendments would be required for Z2C12 operation. The RSE on-site review has been approved.

5. N/A

6. None

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 740.

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 3137 assemblies.

9. Zion Station will lose full core discharge capability (for both units) in May 1993, at the end of Unit 2 Cycle 13, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in November, 1994, at the end of Unit 2 Cycle 14.

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