February 14, 1991
Z6D-91-012

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

Dear Sir:

Enclosed please find the Operating Status Report for the month of January, 1991 for Zion Generating Station.

T.P. Joyce
Station Manager
Zion Station

TPJ/RH/dlt

Enclosure

cc: M. Wallace
A. B. Davis (NRC)
J. Leider
M. S. Turbak
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T. J. Kovach
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INPO
Div. of Eng. Health
State of Illinois
Tech Staff File
Director, Office of Inspection
and Enforcement
Master File

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1/1

OPERATING DATA REPORT

DOCKET NO. 50-295
DATE 02/14/91
COMPLETED BY R. Herron
TELEPHONE (708) 746-2084
X2966

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 910101 to 2400 910131
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	744.0	149,784.0
12. Number Of Hours Reactor Was Critical	0.0	0.0	103,174.6
13. Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14. Hours Generator On-Line	0.0	0.0	100,049.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	0.0	290,607,199
17. Gross Electrical Energy Generated(MWH)	0.0	0.0	93,796,264
18. Net Electrical Energy Generated (MWH)	0.0	0.0	89,153,380
19. Unit Service Factor	0.0	0.0	66.8
20. Unit Availability Factor	0.0	0.0	66.8
21. Unit Capacity Factor (Using MDC Net)	0.0	0.0	57.2
22. Unit Capacity Factor (Using DER Net)	0.0	0.0	57.2
23. Unit Forced Outage Rate	100.0	100.0	15.3

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 Te Status (Prior to Commercial Operation): Forecast Achieved

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

OPERATING DATA REPORT

DOCKET NO. 50-304
DATE 02/14/91
COMPLETED BY R. Herron
TELEPHONE (708) 746-2084 x2966

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 910101 to 2400 910131
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	744.0	143,497.0
12. Number Of Hours Reactor Was Critical	600.0	600.0	103,833.7
13. Reactor Reserve Shutdown Hours	0.0	0.0	226.1
14. Hours Generator On-Line	579.5	579.5	100,978.5
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,867,739	1,867,739	299,760,244
17. Gross Electrical Energy Generated(MWH)	593,030	593,030	95,812,100
18. Net Electrical Energy Generated (MWH)	570,628	570,628	91,184,324
19. Unit Service Factor	77.9	77.9	70.4
20. Unit Availability Factor	77.9	77.9	70.4
21. Unit Capacity Factor (Using MDC Net)	73.7	73.7	61.1
22. Unit Capacity Factor (Using DER Net)	73.7	73.7	61.1
23. Unit Forced Outage Rate	22.1	22.1	14.0

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:
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 02/14/91
COMPLETED BY R. Herron
TELEPHONE (708) 746-2084

REPORT MONTH JANUARY 1991

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
	901204	F	744.0	A	4				Continuation of Outage forced by bypass valve packing leak. Off-line during the entire month of January.

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

* Correction made to NO.6; 652.5 hours incorrectly reported. Correct hours are 652.8 resulting in an increase of .3 to forced outage hours for 12/04/90.

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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-304
UNIT NAME Zion Unit 2
DATE 02/14/91
COMPLETED BY R. Herron
TELEPHONE (708) 746-2084

REPORT MONTH JANUARY 1991

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	910104	F	164.5	A	1				Unit was taken off-line when both SI PPs failed their periodic test.
2	910129	F	5.3	D	5				Power was reduced when lack of Type C leak testing of two containment penetrations was identified.

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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-295
UNIT Zion Unit 1
DATE 02/14/91
COMPLETED BY R. Herron
TELEPHONE (708) 746-2084
x2966

MONTH JANUARY 1991

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

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-304
UNIT Zion Unit 2
DATE 02/14/91
COMPLETED BY R. Herron
TELEPHONE (708) 746-2084
x2966

MONTH JANUARY 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1012	17	1029
2	1044	18	1036
3	1055	19	1035
4	591	20	1025
5	-18	21	1045
6	-18	22	1051
7	-18	23	1050
8	-18	24	1051
9	-17	25	1031
10	-18	26	1014
11	141	27	903
12	791	28	1029
13	1018	29	863
14	1026	30	969
15	1017	31	1025
16	1032		

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 1991

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

Unit 1 continued to be in cold shutdown for the entire month of January due to the repair of the 1D Reactor Coolant Pump.

UNIT 2

Unit 2 began January at full power operation (1054 MWe 95.0% reactor power) and on Economic Generation Control. On 1/4/91 the unit was taken off-line at 1500 Hrs. after the both SI PPs were declared inoperable due to failing their periodic test based on inadequate recirculation flow. The unit was placed back on-line at 1130 on 1/11/91 following resolution of the SI PP recirculation flow deficiencies. On 1/29/91 power was reduced to 490 MWe when lack of Type C leak testing of two containment penetrations was identified. The power reduction was begun at 1445 Hrs. but at 2015 the unit was released for full power operation following receipt of a temporary waiver of compliance from NRC. The unit ended the reporting period at 1066 Mwe (96.0% reactor power).

JANUARY 1991

MAJOR SAFETY RELATED MAINTENANCE

Equipment Name	Work Performed
(UNIT 1)	
Pressurizer Auxiliary Spray Valve 1VC-8146	Machining Flange
1A Diesel Generator	Misc. Work
#2 Component Cooling Heat Exchanger	Tube Leak Repair
Containment Isolation Valves IA01A & B	Cut Out and Replace Due to Excessive Leak
Misc. Motor Operated Valve Inspections	
(UNIT 2)	
2A & B Safety Injection Pumps	Eliminated Restriction on Common Recirculation Line to RWST. Note, also Removed Misc. Debris From Within the RWST.
2N35 Intermediate Range Nuclear	Repaired Gain Adjust

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 fluency reduction program beginning with Z1C13.

   A Tech Spec change is also being submitted 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 Z1C13 reload are expected to be submitted in the Fall/Winter 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.

Unit 2 - Answers

1. Zion Unit 2

2. Cycle 12 is scheduled to Shutdown January 13, 1992 for refueling.

3. Cycle 13 is scheduled to start up March 23, 1992.

4. Yes. Technical Specification changes will be required 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 is also being submitted 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 are expected to be submitted in Spring/Summer 1991.

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 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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