December 12, 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 November, 1990 for Zion Generating Station.

T.P. Joyce
Station Manager
Zion Station

TPJ/JT/jl

Enclosure

cc: M. Wallace
A. B. 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

3153o(1)

IE24

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.

   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 fluence 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.

OPERATING DATA REPORT

DOCKET NO. 50-295
DATE 12/10/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 901101 to 2400 901131
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	720.0	8,016.0	148,296.0
12. Number Of Hours Reactor Was Critical	593.8	5,005.8	103,083.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	2,621.8
14. Hours Generator On-Line	569.7	4,658.2	99,957.9
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,607,700	13,805,347	290,327,416
17. Gross Electrical Energy Generated(MWH)	543,010	4,629,172	93,701,981
18. Net Electrical Energy Generated (MWH)	515,843	4,363,617	89,070,481
19. Unit Service Factor	79.1	58.1	67.4
20. Unit Availability Factor	79.1	58.1	67.4
21. Unit Capacity Factor (Using MDC Net)	68.9	52.3	57.8
22. Unit Capacity Factor (Using DER Net)	60.9	52.3	57.8
23. Unit Forced Outage Rate	20.9	37.2	14.4

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 Commerical Operation): Forecast Achieved

INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

OPERATING DATA REPORT

DOCKET NO. 50-304
DATE 12/10/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 901101 to 2400 901130
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	720.0	8,016.0	142,009.0
12. Number Of Hours Reactor Was Critical	630.0	2,378.7	102,489.7
13. Reactor Reserve Shutdown Hours	0.0	0.0	226.1
14. Hours Generator On-Line	605.0	**2,218.1	99,655.0
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,528,670	6,057,128	295,526,775
17. Gross Electrical Energy Generated(MWH)	505,051	2,011,061	94,416,826
18. Net Electrical Energy Generated (MWH)	477,704	1,875,259	89,842,549
19. Unit Service Factor	84.0	27.7	70.2
20. Unit Availability Factor	84.0	27.7	70.2
21. Unit Capacity Factor (Using MDC Net)	62.0	22.5	60.8
22. Unit Capacity Factor (Using DER Net)	62.0	22.5	60.8
23. Unit Forced Outage Rate	16.0	***12.9	15.5

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 Commerical Operation):

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

** Note: Line 14 Yr-to-Date, for the month of October should be 1,613.1. It was reported as 1613.0.

*** Note: Line 24 Yr-to-Date, for the month of October should be 53.0. It was reported as 100.0.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-295
UNIT NAME Zion Unit 1
DATE 12/11/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

REPORT MONTH NOVEMBER

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
4	901106	F	150.3	A	2				(1.A) Diesel Generator failed to start (150.3 hours duration)
5	901113	S	2.3	B	1				Turbine overspeed testing - (2.3 hours duration) Unit One remained on-line the remainder of November 1990.

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 12/10/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

REPORT MONTH NOVEMBER

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
3	900922	F	53.6	A	3				The Continuation of the 2W Main transformer explosion and fire. Unit 2 remained off-line into November for the (duration of 53.6 hours.)
4	901103	S	3.1	B	1				Off-line for (3.1 Hr. duration) for turbine overspeed test.
5	901111	F	31.9	A	3				Off-line for (31.9 Hr duration) Unit tripped due to low Bearing Oil Pressure Trip Diaphragm Failure

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
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Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

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Exhibit 1 - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-304
UNIT NAME Zion Unit 2
DATE 12/10/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

REPORT MONTH NOVEMBER

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
6	901118	F	19.8	A	1				Unit Shutdown for the (duration of 19.8 hrs.) for Heater Drain Tank Rupture Disc Replacement.
	901127	F	4.0	A	5				Unit reduced power of 60% (for duration of 4 Hrs) when Diesel Generator Oil Line failed during performance test. The (EDG) was returned to service prior to the Unit being taken off line and the Unit remained on the remainder 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 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 12/10/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

MONTH NOVEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	1017	17	1005
2	1064	18	643
3	1034	19	1005
4	964	20	988
5	947	21	937
6	650	22	986
7	-14	23	980
8	-14	24	975
9	-13	25	887
10	-14	26	1016
11	-24	27	765
12	7	28	685
13	275	29	1037
14	636	30	1046
15	1049		
16	1037		

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 12/10/90
COMPLETED BY C. Francke
TELEPHONE (708) 746-2084

MONTH NOVEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-14	17	446
2	-14	18	480
3	124	19	96
4	317	20	642
5	511	21	1050
6	974	22	973
7	1024	23	1005
8	1024	24	1040
9	1031	25	1028
10	1026	26	1004
11	419	27	925
12	-30	28	801
13	317	29	1031
14	685	30	1040
15	475		
16	466		

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.

NOVEMBER

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

The Unit entered the reporting period at a power level of 1049 MWe (94.0% reactor power). On 11/06/90 at 1629 the Unit went off line for 1A, Diesel Generator failed to start. On 11/11/90 the reactor went critical at 2020 hours. On 11/12/90 at 1027 hours was synchronized to the grid. At 0830 hours on 11/13/90 Unit went off line for turbine overspeed planned testing, at 1052 hours on 11/13/90, the Unit was synchronized to grid and remained on line the remainder of the reporting period ending at a power level of 1091 MWe (98.6 % reactor power) and having a availability factor of 79.1%.

UNIT 2

The Unit entered the reporting period off line. On 11/2/90 at 1120 hours the Unit was made critical and on 11/3/90 at 0538 was synchronized to the grid. At 1847 hours on 11/3/90 the Unit was taken off-line briefly for a Turbine Overspeed Test. At 2148 hours the Unit was synchronized to the grid. On 11/11/90 at 1014 hours the Unit went off-line due to a low Bearing Oil Pressure trip diaphragm failure. On 11/12/90 at 1807 hours the Unit went critical at 0050 hours on 11/13/90 it was synchronized to grid. On 11/18/90 at 1830 hours the Unit went off-line for Heater Drain tank rupture Disc Replacement. The Unit returned to synchronized grid on 11/19/90 at 1417 hours and remained at full power the remainder of the reporting period, ending at 1091 MWe (98.6% reactor power) with a availability factor 84.0%.

NOVEMBER

MAJOR SAFETY RELATED MAINTENANCE

Equipment Name	Work Performed
(UNIT 1)	
0, Diesel Generator	Starting Air Solenoid Replacement
(UNIT 2)	
2A, Emergency Diesel Generator	Repair of Failed Air Regulator
0, Emergency Diesel Generator	Repair of Failed Oil Line