



Commonwealth Edison

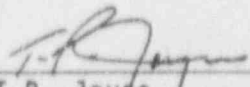
Zion Generating Station
101 Shiloh Blvd.
Zion, Illinois 60099
Telephone 708 / 746-2384

November 13, 1992
ZAD-92-014

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Attached is the October 1992 Operating Status Report.


T.P. Joyce
Station Manager
Zion Station

TPJ/DFK/dfk

Enclosure

cc: Regulatory Assurance
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ZCLERK-5(1)

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PDR ADDCK 05000295
R PDR

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OPERATING DATA REPORT

DOCKET NO. 50-295
 DATE 11/13/92
 COMPLETED BY D. Kennedy
 TELEPHONE (708) 746-2084
X3169

OPERATING STATUS

1. Unit Name: Zion Unit 1
2. Reporting Period: 0000 920901 to 2400 920930
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 | 745.0 | 7,320.0 | 165,120.0 |
| 12. Number Of Hours Reactor Was Critical | 710.8 | 3,141.3 | 110,968.5 |
| 13. Reactor Reserve Shutdown Hours | 0.0 | 0.0 | 2,621.8 |
| 14. Hours Generator On-Line | 692.7 | 2,847.9 | 107,492.8 |
| 15. Unit Reserve Shutdown Hours | 0.0 | 0.0 | 0.0 |
| 16. Gross Thermal Energy Generated (MWH) | 2,056,106 | 8,160,994 | 312,191,550 |
| 17. Gross Electrical Energy Generated (MWH) | 694,511 | 2,758,370 | 101,035,122 |
| 18. Net Electrical Energy Generated (MWH) | 662,519 | 2,632,023 | 96,045,790 |
| 19. Unit Service Factor | 93.0 | 39.0 | 65.0 |
| 20. Unit Availability Factor | 93.0 | 39.0 | 65.0 |
| 21. Unit Capacity Factor (Using MDC Net) | 85.5 | 34.6 | 56.0 |
| 22. Unit Capacity Factor (Using DER Net) | 85.5 | 34.6 | 56.0 |
| 23. Unit Forced Outage Rate | 7.0 | 12.3 | 17.0 |
| 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 | _____ | _____ |

OPERATING DATA REPORT

DOCKET NO. 50-304
 DATE 11/13/92
 COMPLETED BY D. Kennedy
 TELEPHONE (708) 746-2064
x3169

OPERATING STATUS

1. Unit Name: Zion Unit 2
2. Reporting Period: 0000 920901 to 2400 920930
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 | 745.0 | 7,320.0 | 158,833.0 |
| 12. Number Of Hours Reactor Was Critical | 745.0 | 5,493.4 | 114,272.4 |
| 13. Reactor Reserve Shutdown Hours | 0.0 | 0.0 | 226.1 |
| 14. Hours Generator On-Line | 745.0 | 5,481.7 | 111,313.7 |
| 15. Unit Reserve Shutdown Hours | 0.0 | 0.0 | 0.0 |
| 16. Gross Thermal Energy Generated (MWH) | 1,753,869 | 16,204,685 | 330,193,094 |
| 17. Gross Electrical Energy Generated (MWH) | 583,840 | 5,465,850 | 106,005,807 |
| 18. Net Electrical Energy Generated (MWH) | 552,478 | 5,217,485 | 100,963,093 |
| 19. Unit Service Factor | 100.0 | 75.0 | 70.1 |
| 20. Unit Availability Factor | 100.0 | 75.0 | 70.1 |
| 21. Unit Capacity Factor (Using MDC Net) | 71.3 | 69.0 | 61.1 |
| 22. Unit Capacity Factor (Using DER Net) | 71.3 | 69.0 | 61.1 |
| 23. Unit Forced Outage Rate | 0.0 | 25.1 | 15.6 |
| 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): | <u>Z2R12 - Refueling 11/12/92 - 02/20/93</u> | | |

25. If Shut Down At End Of Report Period, Estimated Date of Startup: -
26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY
 INITIAL ELECTRICITY
 COMMERCIAL OPERATION

Forecast
 Achieved

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-295

UNIT NAME Zion Unit 1

DATE 11/13/92

COMPLETED BY D. Kennedy

TELEPHONE (708) 746-2084 x3169

REPORT MONTH October 1992

| 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 |
|-----|-------|-------------------|---------------------|---------------------|---|-------------------------------|-----------------------------|--------------------------------|---|
| | 01/92 | F | 692.7 | F | 5 | | | | Limit to 96% due to Delta T fluctuation. |

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 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)

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Exhibit 1 - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-304

UNIT NAME Zion Unit 2

DATE 11/13/92

COMPLETED BY D. Kennedy

TELEPHONE (708) 746-2084 x3169

REPORT MONTH October 1992

| 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 |
|-----|------|-------------------|---------------------|---------------------|---|-------------------------------|-----------------------------|--------------------------------|--|
| | | | | | | | | | On-line for the entire reporting period. Coasting Down for the Outage starting 11/12. |

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 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 11/13/92
COMPLETED BY D. Kennedy
TELEPHONE (708) 746-2084
x3169

MONTH October 1992

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|-----|
| 1 | -11 |
| 2 | -11 |
| 3 | 193 |
| 4 | 441 |
| 5 | 707 |
| 6 | 675 |
| 7 | 746 |
| 8 | 748 |
| 9 | 742 |
| 10 | 762 |
| 11 | 763 |
| 12 | 763 |
| 13 | 764 |
| 14 | 764 |
| 15 | 783 |
| 16 | 786 |

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|-----|
| 17 | 784 |
| 18 | 783 |
| 19 | 779 |
| 20 | 783 |
| 21 | 783 |
| 22 | 785 |
| 23 | 785 |
| 24 | 785 |
| 25 | 818 |
| 26 | 784 |
| 27 | 782 |
| 28 | 782 |
| 29 | 775 |
| 30 | 782 |
| 31 | 768 |

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 11/13/92
 COMPLETED BY D. Kennedy
 TELEPHONE (708) 746-2084
x3169

MONTH October 1992

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|------------|
| 1 | <u>666</u> |
| 2 | <u>657</u> |
| 3 | <u>662</u> |
| 4 | <u>660</u> |
| 5 | <u>650</u> |
| 6 | <u>641</u> |
| 7 | <u>638</u> |
| 8 | <u>628</u> |
| 9 | <u>618</u> |
| 10 | <u>614</u> |
| 11 | <u>608</u> |
| 12 | <u>600</u> |
| 13 | <u>592</u> |
| 14 | <u>585</u> |
| 15 | <u>578</u> |
| 16 | <u>573</u> |

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

| | |
|----|------------|
| 17 | <u>566</u> |
| 18 | <u>559</u> |
| 19 | <u>554</u> |
| 20 | <u>543</u> |
| 21 | <u>537</u> |
| 22 | <u>534</u> |
| 23 | <u>526</u> |
| 24 | <u>527</u> |
| 25 | <u>542</u> |
| 26 | <u>505</u> |
| 27 | <u>505</u> |
| 28 | <u>498</u> |
| 29 | <u>492</u> |
| 30 | <u>486</u> |
| 31 | <u>480</u> |

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.

October 1992

SUMMARY OF OPERATING EXPERIENCE

UNIT 1

Unit 1, began October in Mode 3. Unit went Rx Critical - Mode 2 on 10-02-92 at 10:15. On 10-03-92, 04:59 the unit went on-line. The unit concluded the reporting period normal power operation, with limit to 96% power 1064 MWe due to delta T fluctuation.

UNIT 2

Unit 2, began October at 938 MWe power level (85.0% reactor power), remained online through the entire reporting period and ended at 667 MWe (63.6% reactor power). Unit 2 continued power operation under coastdown program in preparation for refueling outage starting on 11-12-92.

October 1992

MAJOR SAFETY RELATED MAINTENANCE

| <u>Equipment Name</u> | <u>Work Performed</u> |
|-----------------------|--|
| (UNIT 1) | |
| 1A Htr. Drain Pp | Seal Work OOS: 10/06/92 |
| 1C FW Pump | Repair Oil Leak on Lovejoy Control: Repairs Completed OOS: 10/07/92 - 10/19/92 |
| 1A SI Pump | Recirc. Flow Low (24 gpm): Recirc Orifice Replaced OOS: 10/09/92 - 10/11/92 |
| 1B D/G | Starting Air Comp Rel. Vlv: Replaced Rel. Vlv. OOS: 10/14/92 - 10/15/92 |
| 1B CD Pump | Repair Drain Valve: Drain Line Repaired. OOS: 10/15/92 - 10/18/92 |
| 1A SW Pump | Discharge Valve Repair: Valve Repaired. OOS: 10/18/92 - 10/23/92 |
| 0B Fire Pump | Repair Drain Line: Drain Line Repaired. OOS: 10/18/92 - 10/22/92 |
| 1B FW Pump | Gov. Valve Positioner Repair: Gov Valve Repaired. OOS: 10/20/92 - 10/23/92 |
| 0B IA Comp | Instrumentation Surveillance: Surveillance Completed. OOS: 10/20/92 - 10/23/92 |
| 0A CC Pump | Breaker Inspection: Inspected - Dusted. OOS: 10/28/92 - 10/30/92 |
| #1 Pp Air Comp | OOS for Tech Staff - Troubleshoot: OOS: 10/30/92 - |

October 1992

MAJOR SAFETY RELATED MAINTENANCE

| <u>Equipment Name</u> | <u>Work Performed</u> |
|-----------------------|---|
| (UNIT 2) | |
| 2B Htr Drain Pp | Cooler/Seals Leak: (Equipment will stay OOS Until outage. OOS: Continue - * |
| 2C FW Pump | Seal Leak: (Equipment will stay OOS Until outage. OOS: Continue - * |
| 2B CD Pump | Scheduled Lubrication PM: PM Completed. OOS: 10/01/92 - 10/02/92 |
| 2C CD Pump | Scheduled Lubrication PM: PM Completed. OOS: 10/06/92 - 10/06/92 |
| 2B Aux FW Pump | Scheduled Oil Sample for MM's: Sample Pulled-Oil Changed. OOS: 10/07/92 - 10/07/92 |
| 2C Aux FW Pump | Scheduled Oil Sample for MM's: Sample Pulled-Oil Changed. OOS: 10/09/92 - 10/09/92 |
| 2A Aux FW Pump | Adjust Trip Valve Spring: Adjustment Completed. OOS: 10/13/92 - 10/14/92 |
| 2A D/G | Jacket Water Leak: Leak Repaired. OOS: 10/14/92 - 10/15/92 |
| 2A Pp Air Comp | MCC Bucket Replacement: Breaker Tested. OOS: 10/16/92 - 10/21/92 |
| #2 Pp Air Comp | Cooler Inspection: Work Completed. OOS: 10/27/92 - 10/30/92 |
| 2A Aux FW Pp | Inoperable Due to 2MOV-MS006 Failure: MOV Repaired. OOS: 10/23/92 - 10/28/92 |
| 2A ('CDB Pump | OOS For Check Valve Replacement OOS: 10/30/92 - ** |

* Work Will Be Completed During The Refueling Outage.

**Should Be Complete 11/6/92.
ZCLERK-5(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 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 13 is scheduled to shutdown September 9, 1993 for refueling.
3. Cycle 14 is scheduled to start up January 7, 1994.
4. No Technical Specification changes are planned for ZIC14 so far.
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 2112 fuel assemblies. Plans are being developed to rerack the Spent Fuel Pool to increase storage capacity to 3012 assemblies.
9. Zion Station will lose dual full core discharge capability in January 1994, at the beginning of Unit 1 Cycle 14, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in January 1996, at the beginning of Unit 2 Cycle 15.

Unit 2 - Answers

1. Zion Unit 2
2. Cycle 12 is scheduled to Shutdown November 12, 1992 for refueling.
3. Cycle 13 is scheduled to start up February 20, 1993.
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 were submitted in Summer 1991, and were approved July 26, 1992 Amendment 128.
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 3012 assemblies.
9. Zion Station will lose dual full core discharge capability in January 1994, at the beginning of Unit 1 Cycle 14, based on the latest Nuclear Stations Refueling Schedule. Full core discharge capability for a single core will be lost in January 1996, at the beginning of Unit 2 Cycle 15.

ADDENDUM TO ZION STATION MONTHLY REPORT

Special Report submitted in accordance with Zion Tech Spec. Surv. 4.14.B.5

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

On October 15, 1992 the 1B EDG Starting Air Compressors were both discovered to be inoperable. Upon investigation it was discovered that the train A Starting Air Compressor was deadheaded, by a malfunctioning dryer tower selector valve, and the train B compressor was Out Of Service (OOS). The train B compressor had been taken OOS on 10/13/92 to install a Temporary Alteration to the dryer tower selector valve. The EDG was returned to service on October 16, 1992 following the successful completion of PT-11C. This failure was determined to be invalid per Reg. Guide 1.108 C.2.e.2.

As of October 30 the test frequency for 1B EDG remains at 31 days.