# OPERATING DATA REPORT

DOCKET NO. 50-295

DATE 9-5-80

COMPLETED BY J.M. COOK

TELEPHONE 312-746-2084

	OPERATING STATUS			
1	Unit Name: Zion Unit	1	Notes	
	Reporting Period: 0000 800801 to			
	Licensed Thermal Power (MWt): 32			
	Nameplate Rating (Gross MWe):	The state of the s		
	Design Electrical Rating (Net MWe):			
	Maximum Dependable Capacity (Gross MWe): _			
7.	Maximum Dependable Capacity (Net MWe):	1040		
	If Changes Occur in Capacity Ratings (Items Num	nber 3 Through 7) Since	e Last Report Give R	asons:
_		NIA	- can report, one re	20113.
•			, , , , , , , ,	
9.	Power Level To Which Restricted, If Any (Net M	We):	I/ A	
10.	Reasons For Restrictions, If Any:	N/A		
				SINCE COMMER
		This Month	Yrto-Date	Cumulative 13
				Cumulative
	Hours In Reporting Period	744	5,855	58463
	Number Of Hours Reactor Was Critical	719.2	4,641.5	41,749.2
	Reactor Reserve Shutdown Hours	0		2.621.8
	Hours Generator On-Line	668.9	4,489.5	40,576.8
	Unit Reserve Shutdown Hours	0	0	0
10.	Gross Thermal Energy Generated (MWH)	2,048,865	13,853,092	113,236,093
17.	Gross Electrical Energy Generated (MWH)	630,670	4,297,150	36,529, 300
18.	Net Electrical Energy Generated (MWH)	(.02.508	4,086,457	34,576,203
	Unit Service Factor	89.9	76.7	69.4
	Unit Availability Factor	89.9	76.7	69.4
	Unit Capacity Factor (Using MDC Net)	77.9	67.1	56.9.
	LIMIT I BROCHTY MARKON (Lining DED Mark)	) / U		56.9
22.	Unit Capacity Factor (Using DER Net)	The same of the sa	67.1	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I
3.	Unit Forced Outage Rate	10.1	23.3	14.4
22.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type	, Date, and Duration of	23.3	14.4
2.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule	Date, and Duration of	23.3	14.4
22.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule	Date, and Duration of	23.3 (Each): ovary 1, 19	14.4
22.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule for approximate	Date, and Duration of L for Jan Ly 7 wee	23.3 (Each): nuary 1, 19 KS	14.4
12.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule for approximate  If Shut Down At End Of Report Period, Estimates	Date, and Duration of Landy 7 weed Date of Startup:	23.3 (Each): nvary 1, 19 KS N/A	14.4
22.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule for approximate	Date, and Duration of Landy 7 weed Date of Startup:	23.3 (Each): nuary 1, 19 KS	14.4
12.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule for approximate If Shut Down At End Of Report Period, Estimated Units In Test Status (Prior to Commercial Operation	Date, and Duration of Landy 7 weed Date of Startup:	23.3 (Each): nvary 1, 19 KS N/A	14.4
12.	Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type Refueling schedule for approximate  If Shut Down At End Of Report Period, Estimates	Date, and Duration of Landy 7 weed Date of Startup:	23.3 (Each): Ovary 1, 19 KS  A/A  Forecast	14.4

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-295

UNIT 2ion Unit 1

DATE 9-5-80

COMPLETED BY J.M. Cook

TELEPHONE 312-746-2084

Ext. 363

AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
934	17	943
945	18	958
948	19	949
941	20	963
952	21	963
956	22	418
959	23	303
952	24	541
946	25	460
955	26	-33
944	27	-33

#### INSTRUCTIONS

MONTH AVQUST 1980

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.

#### UNIT SHUTDOWNS AND POWER REDUCTIONS

# REPORT MONTH AUGUST 1980

DOCKET NO. 50-295 UNITNAME Zion UniT 1 DATE \_ COMPLETED BY J.M. COOK 312.746-2084 TELEPHONE ExT. 363

No.	Date	Type	Duration (Hours)	Reason?	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code5	Cause & Corrective Action to Prevent Recurrence
16	800822	F	19.1	В	3	NJA	NIA	NIA	REACTOR TRIP Due to 1B Steam Generator 10-10 level.
17	800825	F	44.3	А	1	NIA	NA	NIA	Generator off-line due to voltage regulation problem.
18	800827	F	11.7	Α	3	NA	N/A	NA	Reactor trip/Turbine trip due to 18 FWP.

F: Forced S: Scheduled

Reason:

A-Equipment Failure (Explain) B-Maintenance of Test

C-Refueling

**D-Regulatory Restriction** 

E-Operator Training & License Examination

F-Administrative

G-Operational Error (Explain)

H-Other (Explain)

Method:

3

1-Manual

2-Manual Scram.

3-Automatic Scram.

4-Other (Explain)

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

Exhibit 1 - Same Source

(9/77)

#### **OPERATING DATA REPORT**

DOCKET NO. 50-304

DATE 9-5-80

COMPLETED BY J.M. COOK

TELEPHONE 312-246-2084

Ex 7.363

1. Unit Name: Zion Unit 2	Notes   Notes	
	0831	
2. Reporting Period: 0000 800801 +0 2400 80	-001	
3. Licensed Thermal Power (MWt): 3250		
4. Nameplate Rating (Gross MWe): / 085		
5. Design Electrical Rating (Net MWe): 1040		
6. Maximum Dependable Capacity (Gross MWe): 1085		
7. Maximum Dependable Capacity (Net MWe):	0	
8. If Changes Occur in Capacity Ratings (Items Number 3 Thro	ugh 7) Since Last Report Give	Reasons:
NIA		
9. Power Level To Which Restricted, If Any (Net MWe):	NIA	
10. Reasons For Restrictions, If Any:		
		Operation any
This M	onth Yrto-Date	Operation 9-14-7
11. Hours In Reporting Period	4 5.855	52.176
	4.5 3 368.9	36,972.6
13. Reactor Reserve Shutdown Hours	70	226.1
14. Hours Generator On-Line 68	6.6 3199.2	37 013.0
15. Unit Reserve Shutdown Hours	0	0
<ol> <li>Gross Thermal Energy Generated (MWH) 1,959.</li> </ol>	457 9,566,24	2 102,201,560
7. Gross Electrical Energy Generated (MWH) 618		
18. Net Electrical Energy Generated (MWH) 586		
9. Unit Service Factor 92	1.3 54.6	70.9
20. Unit Availability Factor 92	1.3 54.4	70.9
21. Unit Capacity Factor (Using MDC Net) 7.5	5.8 48.2	57.4
	5.8 48.2	52.4
3. Unit Forced Outage Rate	.7 21.3	17.6
4. Shutdowns Scheduled Over Next 6 Months (Type, Date, and	Duration of Each):	
NIA		
5. If Shut Down At End Of Report Period, Estimated Date of St	tartup: N/A	
6. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICAL INITIAL INITI		
INITIAL CRITICALITY		
INITIAL ELECTRICITY COMMERCIAL OPERATION	N/A	

#### AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-304

UNIT Zion Unit 2

DATE 9-5-80

COMPLETED BY J.M. Cook

TELEPHONE 312-746-2084

Ext. 363

MONTH AUGUST 1980

AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
888	17	824
912	18	841
922	19	831
906	20	831
900	21	834
866	22	831
920	23	834
904	24	818
861	25	836
-33	26	832
-31	27	831
433	28	700
980	29	853
912	30	887
829	31	895
791		

#### 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.

#### UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH August 1980

50-304 DOCKET NO. UNITNAME Zion Unit 2 9-5-80 DATE J.M. COOK COMPLETED BY TELEPHONE 312-746-2084 EXT. 363

No.	Date	Typel	Duration (Hours)	Reason-	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code 5	Cause & Corrective Action to Prevent Recurrence
18	800809	F	15.9	8	1	NIA	NIA	NIA	Turbine / Generator off for repairs of STATOR Water cooling Pumps.
19	800810	F	5.1	Α	3	NIA	NIA	NA	Reactor trip due to s/6 2D  10-level in coincilent with steam flow/feed flow mismatch due to Steam spike while attempting to Start B feedwater pump.
70	800810	F	36.4	A	3	NIA	N)A	~/A	Reactor trip s/b ac stram Flow/ Freel Flow mismatch coincident with 10-level caused by generator reverse power trip due to a problem with the EHC system.
al	800898	F	0	А	3	NIA	A)A	۹( بہ	Load reduced to Locate primary coolant system LEAK.

F: Forced S: Scheduled

Reason:

A-Equipment Failure (Explain) B-Maintenance of Test

C-Refueling

**D-Regulatory Restriction** 

E-Operator Training & License Examination

F-Administrative

G-Operational Error (Explain)

H-Other (Explain)

Method:

I-Manual

2-Manual Scram.

3-Automatic Scram.

4-Other (Explain)

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

(9/77)

## SUMMARY OF OPERATING EXPERIENCE

## UNIT 1

The Unit entered the reporting period at a power level of 997 MWe (99% reactor power). The Unit remained at, or near this power level until August 22nd, at 1045 hours when the reactor tripped, due to 1B steam generator lo-lo level. The Unit was made critical on August 23rd, at 0306 hours, and was synchronized to the grid at 0550 hours. On August 25th, at 1845 hours the generator was taken down manually, due to voltage regulation problems and was synchronized to the grid on August 27th, at 1505 hours. On August 27th, at 1535 hours a reactor trip/turbine trip occurred, due to 1B feedwater pump. The Unit was made critical on August 28th, at 0001 hours and was synchronized to the grid at 0317 hours. Overall, the Unit performed very well, having an Availability Factor of 89.9% and a Capacity Factor of 78.1%. The Unit ended the month on-line at a power level of 1015 MWe (98% reactor power).

### UNIT 2

The Unit entered the reporting period at a power level of 942 MWe (90% reactor power). On August 9th, at 2305 hours the turbine/generator was manually shutdown for the repairs of stator water cooling pumps. On August 10th, at 1502 hours the reactor tripped, due to steam generator 2D lo-level in coincident with steam flow/feed flow mismatch, due to steam spike while attempting to start "B" feedwater pump. The Unit was made critical at 1700 hours, and at 2010 hours the reactor tripped from steam generator 2C steam flow/feed flow mismatch coincident with lo-level caused by generator reverse power trip, due to a problem with the EHC system. On August 11th, at 0340 hours the Unit was made critical, and was synchronized to the grid on August 12th, at 0830 hours. Overall, the Unit performed very well having an Availability Factor of 92.3% and a Capacity Factor of 76.7%. The Unit ended the month on-line at a power level of 940 MWe (92% reactor power).

# AUGUST MAJOR SAFETY RELATED MAINTENANCE

### Equipment Name

## Work Done

2B R.C. Pump Seals

Replaced #4 seal, seal insert, runner. Replaced motor connected to pump.

2B Reactor Coolant Pump

No. 3 seal replaced

2D Reactor Coolant Pump

Complete seal inspection for fluctuation #1 leakoff and high stand pipe alarm

2A Charging Pump

Installed new inboard and outboard mech. seals, new shaft sleeves, new thrust shoes, new sleeve "O" rings and associated gaskets.

2A Auxiliary Feed Pump Turbine

Installed new gov. end radial bearing, new thrust bearing, new carbon seal rings inboard and outboard and new gaskets and oil seal.

2C Containment Spray Pump

Installed new bearings

# 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?

- 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.
- January 1, 1981 is the scheduled date for the next refueling outage.
- February 18, 1981 is the scheduled date for initial criticality following refueling.
- 4. The reload fuel design and core configuration has not undergone On-Site and Off-Site Review. However, no Technical Specification thanges or license amendments are anticipated. The On-Site and Off-Site review of the Cycle VI fuel design and core configuration is currently scheduled for completion by November 1, 1980.
- 5. If the need for Technical Specification changes or other license amendments arise from the review in 4 above, then November 1, 1980 will be the scheduled date for submitting the required information.
- 6. No important licensing considerations are anticipated with this refueling.
- The number of fuel assemblies
  - a) in the core is 193, and
  - b) in the spent fuel storage pool, which have been discharged from Zion Unit 1, is 248.
- 8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 2) is 2112 fuel assemblies. The installation of the new storage racks is scheduled to begin within the next two months.
- 9. October, 1992 is the projected date of the last Zion Unit 1 refueling which can be discharged to the spent fuel pool assuming the present licensed capacity.

# Unit 2 - Answers

- 1. Zion Unit 2
- September 12, 1981 is the scheduled date for the next refueling outage.
- October 31, 1981 is the scheduled date for initial criticality following refueling.
- 4. The reload fuel design and core configuration has not undergone On-Site and Off-Site Review. However, no Technical Specification changes or license amendments are anticipated. The On-Site and Off-Site review of the Cycle VI fuel design and core configuration is currently scheduled for completion by July 15, 1981.
- 5. If the need for Technical Specification changes or other license amendments arise from the review in 4 above, then August 1, 1981 will be the scheduled date for submitting the required information.
- No important licensing considerations are anticipated with this refueling.
- The number of fuel assemblies
  - a) in the core is 193, and
  - b) in the spent fuel storage pool which have been discharged by Zion Unit 2 is 260.
- 8. The present licensed spent fuel pool storage capacity (shared with Zion Unit 1) is 2112 fuel assemblies. The installation of the new storage racks is scheduled to begin within the next two months.
- 9. October, 1992 is the projected date of the last Zion Unit 2 refueling, which can be discharged to the spent fuel pool assuming the present licensed capacity.