

OPERATING DATA REPORT

DOCKET NO. 050-0331
 DATE 08-15-91
 COMPLETED BY Hai Tran
 TELEPHONE (319) 851-7491

OPERATING STATUS

Notes

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: July 1991
3. Licensed Thermal Power (MWt): 1658
4. Nameplate Rating (Gross MWe): 565 (Turbine)
5. Design Electrical Rating (Net MWe): 538
6. Maximum Dependable Capacity (Gross MWe): 565
7. Maximum Dependable Capacity (Net MWe): 538
8. If Changes Occur in Capacity Ratings (Items Number 3 through 7) Since the 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	<u>744.0</u>	<u>5087.0</u>	<u>144599.0</u>
12. Number of Hours Reactor Was Critical	<u>744.0</u>	<u>4604.5</u>	<u>105115.3</u>
13. Reactor Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>192.8</u>
14. Hours Generator On-Line	<u>724.9</u>	<u>4526.9</u>	<u>102235.1</u>
15. Unit Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1171202.4</u>	<u>7329544.8</u>	<u>137050778.8</u>
17. Gross Electrical Energy Generated (MWH)	<u>383599.0</u>	<u>2406080.0</u>	<u>45959971.0</u>
18. Net Electrical Energy Generated (MWH)	<u>360357.8</u>	<u>2258802.4</u>	<u>43076503.6</u>
19. Unit Service Factor	<u>97.4</u>	<u>89.0</u>	<u>70.7</u>
20. Unit Availability Factor	<u>97.4</u>	<u>89.0</u>	<u>70.7</u>
21. Unit Capacity Factor (Using MDC Net)	<u>90.0</u>	<u>82.5</u>	<u>57.4</u>
22. Unit Capacity Factor (Using DER Net)	<u>90.0</u>	<u>82.5</u>	<u>55.4</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>4.7</u>	<u>13.5</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of each: <u>N/A</u>)			
25. If Shutdown at End of Report Period, Est. Date of Startup: <u>N/A</u>			

(9/77)

9108210265 910815
 PDR ADOCK 05000331
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AVERAGE DAILY UNIT POWER LEVEL

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MONTH July 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0.0
2	365.0
3	469.0
4	498.0
5	501.0
6	478.0
7	491.0
8	514.0
9	513.0
10	513.0
11	510.0
12	506.0
13	517.0
14	500.0
15	509.0

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
16	510.0
17	508.0
18	509.0
19	509.0
20	504.0
21	477.0
22	502.0
23	514.0
24	543.0
25	517.0
26	537.0
27	516.0
28	503.0
29	518.0
30	512.0
31	512.0

REFUELING INFORMATION

DOCKET NO. 50-0331
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1. Name of facility.
 - a. Duane Arnold Energy Center
2. Scheduled date for next refueling shutdown.
 - a. March 1, 1992
3. Scheduled date for restart following refueling.
 - a. May 1, 1992
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

N/A
5. Scheduled date(s) for submitting proposed licensing action and supporting information.

N/A
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.

N/A
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.
 - a. 368
 - b. 1048
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.
 - a. 2050 - Licensed Capacity or
 - b. 1898 under the presently installed storage rack capacity.
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.
 - a. 2000 - Licensed Capacity or
 - b. 1997 under the presently installed storage rack capacity.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: July 1991

Docket No.: 050-0331

Unit: Duane Arnold Energy Center

Date: 08-15-91

Completed By: Hai Tran

Telephone: (319) 851-7491

No.	Date	Type(1)	Duration (Hours)	Reason(2)	Method of Shutting (3) Down Reactor	Licensee Event Report #	System Code (4)	Comp. Code (5)	Cause
1	07-01-91	S	19.1	B	4	N/A	SB	ISV	The plant was in the process of starting up from an outage for pre-planned maintenance activities on the 'C' inboard and outboard Main Steamline Isolation Valve.

1 - F: Forced
S: Scheduled

2 - Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

3 - Method
1-Manual
2-Manual Scram
3-Automatic Scram
4-Continued
5-Reduced Load
9-Other (Explain)

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

5 - Exhibit 1-
Same Source

MAJOR/SAFETY RELATED MAINTENANCE

Docket No.: 050-0331
 Unit: Duane Arnold Energy Center
 Date: 08-15-91
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DATE	SYSTEM	COMPONENT	DESCRIPTION
07-16-91	Reactor Core Isolation Cooling System (RCIC)	Oil Drain Line	Found oil leak on the oil drain line and level sight glass. The leaks were repaired.
07-22-91	Residual Heat Removal Service Water (RHRSW) System	'A' RHRSW Pump	The 'A' RHRSW pump was taken out for pre-planned maintenance. The pump has been refurbished and is in the process of post-maintenance testing.
07-31-91	RCIC System	Instrument Isolation Valve	The isolation valve for the steam supply line pressure switch would not close. The isolation valve was replaced.

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

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07-01-91 At the beginning of the month the plant was in the process of starting up from an outage for pre-planned maintenance activities on the 'C' outboard Main Steamline Isolation Valve. Reactor startup was commenced at 1717 hours on June 30, 1991. The reactor was taken critical at 1822 hours. The main generator was synchronized with the grid at 1904 hours on July 1, 1991. There was one 10 CFR 50.73 reportable event during the month.

07-11-91 The plant was operating at 100% power when a primary containment isolation system group III ('A' side) isolation occurred along with the initiation of the 'A' standby gas treatment system and isolation of secondary containment. Investigation of the isolation determined that a fuse had blown in the circuit which supplies power to the 'A' refuel pool exhaust radiation monitor. Following replacement of the fuse, the isolation was reset. The cause of the group III isolation was loss of power to the 'A' refuel pool exhaust radiation monitor. On a loss of power, the monitor defaults to the tripped condition. Investigation into the cause for the blown fuse did not identify any conditions which would have caused the fuse to blow. The blown fuse was replaced without further problems. The event had no effect on the safe operation of the plant.

LER 91-006

07-31-91 At the end of the month the plant was operating at 99.9% of rated thermal power delivering 512 MWe to the grid.