



August 15, 1995  
NG-95-2583

Duane Arnold Energy Center  
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Mr. Hubert J. Miller  
Regional Administrator  
Region III  
U.S. Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, IL 60532-4351

Subject: Duane Arnold Energy Center  
Docket No: 50-331  
Operating License DPR-49  
July 1995 Monthly Operating Report

Dear Mr. Miller:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for July 1995. The report has been prepared in accordance with the guidelines of NUREG-0020 and distribution has been made in accordance with DAEC Technical Specifications, Section 6.11.1.c.

Very truly yours,

Gary Van Middlesworth  
Plant Superintendent, Nuclear

GV/RBW/cc  
Enclosures  
File A-118d  
cc:

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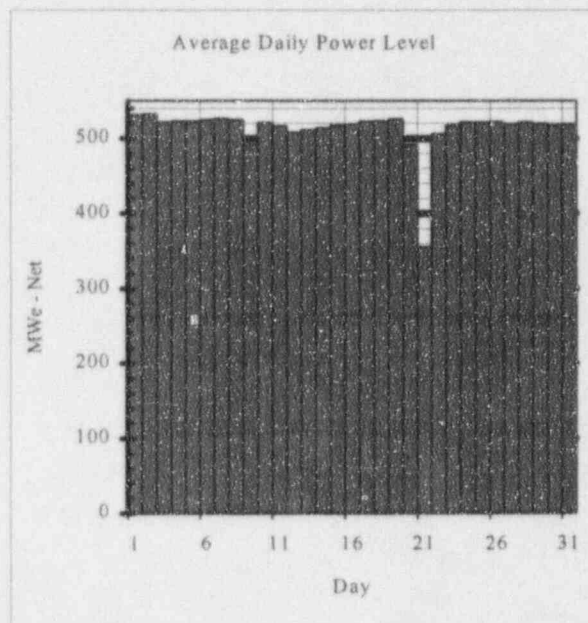
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# OPERATING DATA REPORT

DOCKET NO: 50-0331  
 DATE: 08/15/95  
 Unit: Duane Arnold Energy Center  
 COMPLETED BY: Richard Woodward  
 TELEPHONE: (319) 851-7318

## OPERATING STATUS

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: July 1995
3. Licensed Thermal Power ( $MW_{th}$ ): 1658
4. Nameplate Rating (Gross  $MW_e$  DER): 565.7 (Turbine)
5. Design Electrical Rating (Net  $MW_e$  DER): 538
6. Maximum Dependable Capacity (Gross  $MW_e$  MDC): 545
7. Maximum Dependable Capacity (Net  $MW_e$  MDC): 515
8. If Changes Occur in Capacity Ratings (Items Number 3 through 7) since the last report, Give Reasons: Not Applicable
9. Power Level to Which Restricted, If Any (Net  $MW_e$ ): Not Applicable
10. Reasons for Restrictions, If Any: Not Applicable



		July-95	1995	Cummulative
11.	Hours in Reporting Period	744.0	5,087.0	179,663.0
12.	Number of Hours Reactor Was Critical	744.0	3,672.2	134,852.8
13.	Reactor Reserve Shutdown Hours	0.0	0.0	192.8
14.	Hours Generator On-Line	744.0	3,581.7	131,440.8
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,213,291.4	5,704,735.8	183,233,095.5
17.	Gross Electrical Energy Generated (MWH)	404,510.0	1,922,221.0	61,370,107.5
18.	Net Electrical Energy Generated (MWH)	381,801.5	1,810,617.5	57,550,661.8
19.	Unit Service Factor	100.0%	70.4%	73.2%
20.	Unit Availability Factor	100.0%	70.4%	73.2%
21.	Unit Capacity Factor (Using MDC Net)	99.6%	69.1%	67.7%
22.	Unit Capacity Factor (Using DER Net)	95.4%	66.2%	64.8%
23.	Unit Forced Outage Rate	0.0%	2.1%	11.0%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of each): N/A
25. If Shutdown at End of Report Period, Estimated Date of Startup: N/A

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-0331

DATE: 08/15/95

Unit: Duane Arnold Energy Center

COMPLETED BY: Richard Woodward

TELEPHONE: (319) 851-7318

MONTH July 1995

Day	Average Daily Power Level (MWe-Net)
1	531.3
2	531.7
3	521.8
4	523.0
5	523.1
6	524.8
7	526.4
8	524.5
9	492.0
10	520.7
11	516.5
12	507.9
13	511.3
14	513.4
15	517.9
16	519.2
17	522.3
18	523.4
19	525.3
20	491.8
21	355.5
22	505.7
23	517.4
24	521.4
25	521.5
26	521.9
27	519.1
28	521.3
29	519.9
30	517.5
31	519.1

# REFUELING INFORMATION

DOCKET NO: 50-0331  
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 Unit: Duane Arnold Energy Center  
 COMPLETED BY: Richard Woodward  
 TELEPHONE: (319) 851-7318

**1. Name of facility.**

Duane Arnold Energy Center

**2. Scheduled date for next refueling shutdown.**

Refuel Outage XIV to begin October 10, 1996.

**3. Actual date for restart following refueling.**

November 14, 1996

**4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?**

No

**5. Scheduled date(s) for submitting proposed licensing action and supporting information.**

Not applicable

**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.**

No

**7. Current and projected fuel assemblies inventory:**

	Number of Fuel Assemblies	Projected date of last refueling that can be discharged
installed in reactor core (following refueling)	368	n/a
previously discharged from core to Spent Fuel Storage Pool (following refueling)	1408	n/a
under present physical capacity of Spent Fuel Storage Pool	2411	2007
under Licensed Capacity of Spent Fuel Storage Pool	3152	2014

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# UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: July 1995

No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	System Code (4)	Comp. Code (5)	Cause
6.	07/21/95	F	N/A  (10.2 full- power- equivalent hours)	A	5	N/A	SK Feedwater Pump Injection and Miscellaneous System	P Pump	Reduced to 50% power to repair a leaking casing bolt on the 'A' Reactor Feed Pump

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)



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Monthly Operational Overview for July 1995:

During the month of July the DAEC operated at full power except to perform:

- control rod drive exercises July 4,
- turbine control surveillance testing July 9, and
- to repair a leaking casing bolt on the 'A' Reactor Feed Pump July 21.

Although some of the highest wet-bulb temperatures seen at the plant in several years were recorded July 12-14, thermal output was at no time limited by high condenser back-pressure. Hot-weather-related thermal conversion efficiency losses accounted for 1.7% of the normal equivalent full power output during the month.

Allocation of Production & Losses:	Electrical Output MWe	Capacity Factor % of 565.7 MWe (Design Gross Rating)	Full Power Equivalent Hours
Actual Metered Net Electric Output	513.2	90.7%	674.9
Actual Metered Plant Electric Loads	30.5	5.4%	40.1
Off-Line	0.0	0.0%	0.0
Weather losses, ie., condenser pressure greater than design	10.3	1.7%	13.8
Control Rod Drive Exercises July 4, Turbine Valve testing July 9	1.1	0.2%	1.4
Reactor Feed Pump Repair July 21, Other capacity losses	9.1	1.8%	11.9
Other Efficiency Losses	1.4	0.2%	1.9
Design Gross Electric Output	565.7	100.0%	744.0

On July 26 at 2:04 a.m., during a routine monthly surveillance of the "B" Standby-Gas Treatment System (SBGT), its exhaust fan tripped on thermal overload due to water in the fan housing. The "A" SBGT train (which had been removed from service on July 25 at 4:02 a.m. for pre-planned maintenance) had been returned to service at 1:52 a.m. Further engineering investigation into the "B" SBGT fan trip is examining the possibility that both SBGT trains were simultaneously inoperable during the period between 4:02 a.m. on July 25 and 1:52 a.m. on July 26. (LER #95-07, pending)

Licensing Action Summary:

Plant Availability:	100.0%	Unplanned Auto Scrams (while/critical) this month:	0
Number of reportable events:	1	Unplanned Auto Scrams (while/critical) last 12 months:	1