



September 15, 1995  
NG-95-2805

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  
August 1995 Monthly Operating Report

Dear Mr. Miller:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for August 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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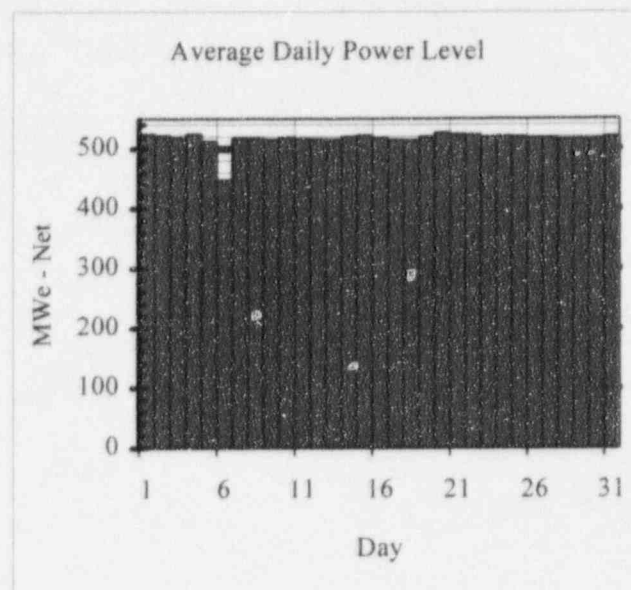
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# OPERATING DATA REPORT

DOCKET NO: 50-0331  
 DATE: 09/15/95  
 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: August 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



		August-95	1995	Cummulative
11.	Hours in Reporting Period	744.0	5,831.0	180,407.0
12.	Number of Hours Reactor Was Critical	744.0	4,416.2	135,596.8
13.	Reactor Reserve Shutdown Hours	0.0	0.0	192.8
14.	Hours Generator On-Line	744.0	4,325.7	132,184.8
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,226,632.5	6,931,368.3	184,459,728.0
17.	Gross Electrical Energy Generated (MWH)	407,140.0	2,329,361.0	61,777,247.5
18.	Net Electrical Energy Generated (MWH)	384,208.7	2,194,826.2	57,934,870.5
19.	Unit Service Factor	100.0%	74.2%	73.3%
20.	Unit Availability Factor	100.0%	74.2%	73.3%
21.	Unit Capacity Factor (Using MDC Net)	100.3%	73.1%	67.8%
22.	Unit Capacity Factor (Using DER Net)	96.0%	70.0%	64.9%
23.	Unit Forced Outage Rate	0.0%	1.8%	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

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MONTH August 1995

Day	Average Daily Power Level (MWe-Net)
1	524.1
2	521.4
3	519.4
4	524.0
5	512.3
6	447.9
7	517.5
8	517.2
9	515.1
10	518.5
11	516.5
12	515.6
13	514.9
14	520.1
15	522.1
16	517.6
17	514.6
18	513.8
19	520.1
20	526.5
21	523.6
22	523.1
23	519.5
24	520.4
25	519.8
26	518.3
27	517.1
28	515.3
29	516.1
30	516.2
31	520.0

## REFUELING INFORMATION

DOCKET NO: 50-0331  
DATE: 09/15/95  
Unit: Duane Arnold Energy Center  
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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: August 1995									
(No shutdowns or power reductions greater than 20%)									
No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	System Code (4)	Comp. Code (5)	Cause

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 I (Same Source)

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#### Monthly Operational Overview for August 1995:

The DAEC operated at full thermal power throughout the month of August except to reduce power to perform a control rod sequence exchange August 4 - 7.

Continued weather-related elevated Circulating Water System temperatures caused thermal conversion efficiency losses equivalent to 2.1% of normal plant output during August, which was even greater than July's losses. However, despite the continued hot weather, the DAEC was at no time during the month capacity-limited by high condenser back-pressure.

#### 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	516.4	91.3%	679.2
Actual Metered Plant Electric Loads	30.8	5.4%	40.5
Off-Line	0.0	0.0%	0.0
Weather losses, ie., condenser pressure / circ water temp greater than design	11.9	2.1%	15.8
Control Rod Drive Exercises Aug. 4 - 6	2.4	0.4%	3.2
Other capacity losses	0.7	0.2%	0.9
Other Efficiency Losses	3.4	0.6%	4.4
Design Gross Electric Output	<u>565.7</u>	<u>100.0%</u>	<u>744.0</u>

A Reactor Protection System (RPS) half scram and several partial primary containment isolations occurred at 10:50 a.m. on August 29. Investigation showed a "B" Electrical Protection Assembly (EPA) breaker had tripped on an undervoltage signal. At 1120 the half scram was reset and at 1130 all isolations were reset. The "B" RPS Motor Generator Set was returned to service September 8 after a week and a half of troubleshooting and testing. Since no definitive problem was identified, additional monitoring equipment will be used to help prevent another trip and also to aid in determining the cause if another trip should occur. This was a four hour reportable event. LER #95-10 (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