Duane Arnold Energy Center
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Telephone 319 851 7611
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IES UTILITIES

October 13, 1995
NG-95-3057

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
September 1995 Monthly Operating Report

Dear Mr. Miller:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for September 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 VanMiddlesworth
Plant Superintendent, Nuclear

GDV/RBW
Enclosures
File A-118d
cc:

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NRC Resident Inspector

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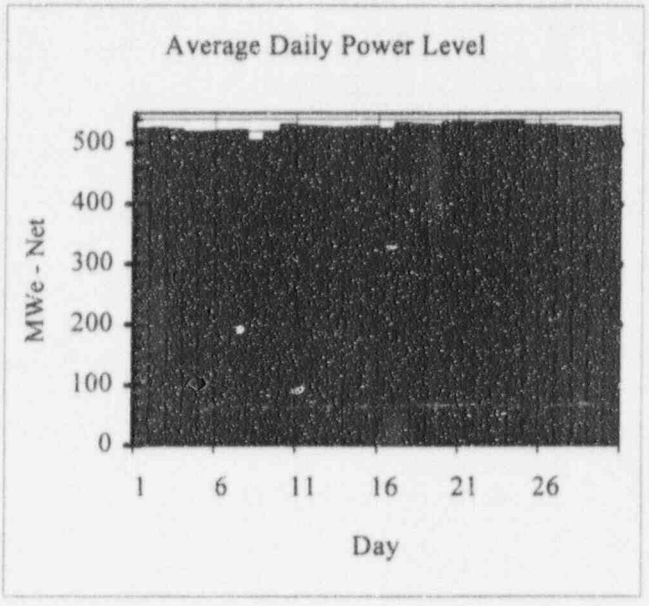
OPERATING DATA REPORT

DOCKET NO: 50-0331
DATE: 10/13/95
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: September 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

		September-95	1995	Cummulative
11.	Hours in Reporting Period	720.0	6,551.0	181,127.0
12.	Number of Hours Reactor Was Critical	720.0	5,136.2	136,316.8
13.	Reactor Reserve Shutdown Hours	0.0	0.0	192.8
14.	Hours Generator On-Line	720.0	5,045.7	132,904.8
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,188,616.4	8,119,984.7	185,648,344.4
17.	Gross Electrical Energy Generated (MWH)	401,578.0	2,730,939.0	62,178,825.5
18.	Net Electrical Energy Generated (MWH)	379,291.6	2,574,117.8	58,314,162.1
19.	Unit Service Factor	100.0%	77.0%	73.4%
20.	Unit Availability Factor	100.0%	77.0%	73.4%
21.	Unit Capacity Factor (Using MDC Net)	102.3%	76.3%	68.0%
22.	Unit Capacity Factor (Using DER Net)	97.9%	73.0%	65.1%
23.	Unit Forced Outage Rate	0.0%	1.5%	10.9%

24. Shutdowns Scheduled Over Next 6 Montns (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 September 1995

Day	Average Daily Power Level (MWe-Net)
1	524.1
2	525.0
3	522.7
4	518.9
5	518.9
6	520.2
7	521.2
8	500.5
9	518.8
10	530.8
11	528.0
12	526.5
13	526.1
14	526.9
15	527.5
16	524.3
17	533.2
18	531.5
19	530.4
20	534.8
21	535.3
22	534.5
23	536.9
24	536.4
25	531.0
26	530.2
27	529.1
28	527.0
29	525.7
30	527.5
31	#N/A

REFUELING INFORMATION

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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: September 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 1 (Same Source)

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Monthly Operational Overview for September 1995:

The DAEC operated at full thermal power throughout the month of September except:

- to reduce power 30 MWe for three hours early September 4 (Labor Day) for lack of grid demand,
- to make control rod adjustments and perform turbine control valve testing September 7-8,
- to backseat the Reactor Core Injection Cooling System (RCIC) outboard steam isolation valve (during the September 8 turbine valve testing) to stop a packing leak, and
- to repair steam leaks in the heater bay, also during the turbine valve testing.

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	526.8	93.1%	670.5
Actual Metered Plant Electric Loads	31.0	5.5%	39.4
Load Following Sept. 4	0.1	0.0%	0.2
Off-Line	0.0	0.0%	0.0
Weather losses, ie., condenser pressure > 2.75 In Hg / Circ Water Temp	3.2	0.7%	4.0
Planned Capacity Losses: Turbine Valve Testing September 8	1.1	0.2%	1.4
Control Rod Drive Exercises: September 7-8	0.3	0.0%	0.4
Unplanned Capacity Loss: Backseat MO2401, Leak Repairs September 8	0.3	0.0%	0.3
Normal Capacity Losses (Avg MWth < 1658)	0.6	0.1%	0.6
Metering Losses (Avg indic MWe - Avg MWHe)	1.8	0.3%	2.3
Efficiency Losses (Weather-Norm-Full-Power-MWe < 565.7)	0.7	0.1%	0.9
Design Gross Electric Output	565.7	100.0%	720.0

On September 20, following maintenance on the High Pressure Coolant Injection (HPCI) system, a spurious momentary Primary Containment Isolation System (PCIS) and HPCI isolation signal was received when a PCIS/HPCI isolation valve was being opened to re-pressurize the HPCI steamline. The PCIS/HPCI isolation valve did not close as expected. The isolation signal was likely caused by steam and water's effect on isolation sensors when the valve was opened. The isolation valve failed to close due to small differences in limit switches that control the auto-isolation feature of the valve. After the isolation signal was reset, the valve was closed manually. HPCI was properly removed from service throughout these events and there was no effect on safe operation. 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