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Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324-9785

Operated by Nuclear Management Company, LLC

August 15, 2002

NG-02-0698

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station 0-P1-17
Washington, DC 20555-0001

Subject: Duane Arnold Energy Center
Docket No: 50-331
Operating License: DPR-49
July 2002 Monthly Operating Report
File: A-118d

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report. The report has been prepared in accordance with the guidelines of NRC Generic Letter 97-02: Revised Contents Of The Monthly Operating Report, and distribution has been made in accordance with DAEC Technical Specifications, Section 5.6.4.

Very truly yours,

John Bjorseth
Plant Manager-Nuclear

JKB/RBW

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IE24

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CTS Project

OPERATING DATA REPORT

DOCKET NO: 50-331
DATE: 08-15-2002
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 2002

3. Licensed Thermal Power (MW_{th}): 1912
Tech Spec. Amendment 243 and TSCR for extended power uprate was implemented November 7, 2001. Current operating thermal power, as limited by balance-of-plant equipment, is 1790.

4. Nameplate Rating (Gross MW_e DER): 676 425
Current rated output, adjusted for as-built balance-of-plant conditions is 614 0.

5. Design Electrical Rating (Net MW_e DER): 581.4

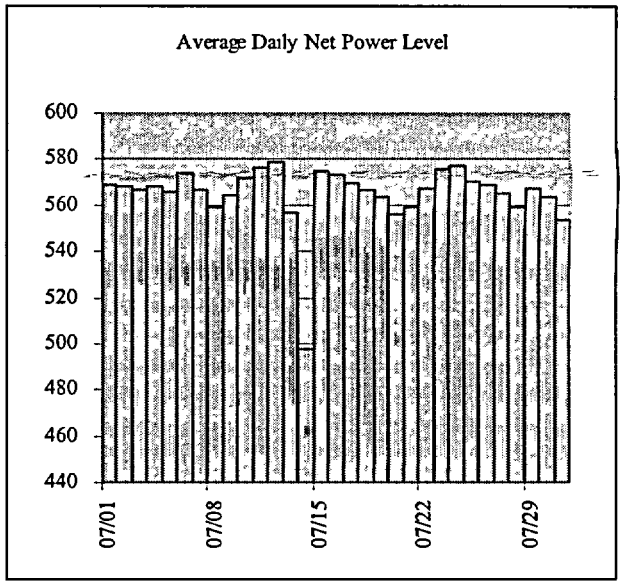
6. Maximum Dependable Capacity (Gross MW_e MDC): 593.1

7. Maximum Dependable Capacity (Net MW_e MDC): 565.5

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 MW_e): N/A

10. Reasons for Restrictions, If Any: N/A



		Jul-02	2002	Cumulative
11.	Hours in Reporting Period	744.0	5,087.0	241,031.0
12.	Number of Hours-Reactor Was Critical	744 0	4,903.7	190,884 3
13.	Reactor Reserve Shutdown Hours	0.0	0.0	192.8
14.	Hours Generator On-Line	744.0	4,862.8	186,787.7
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,323,984 9	8,539,621.5	273,038,251.3
17.	Gross Electrical Energy Generated (MWH)	444,221.0	2,919,111.0	91,653,328.6
18.	Net Electrical Energy Generated (MWH)	420,340.2	2,763,727.9	86,139,353.9
19.	Unit Service Factor	100.0%	95.6%	77.4%
20	Unit Availability Factor	100.0%	95.6%	77.4%
21.	Unit Capacity Factor (Using MDC Net)	99.9%	96.5%	69.5%
22	Unit Capacity Factor (Using DER Net)	97.2%	93.9%	67.1%
23	Unit Forced Outage Rate	0.0%	0.0%	8.4%

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 July 2002

Day	Average Daily Power Level (MWe-Net)
1	569
2	568
3	566
4	568
5	566
6	574
7	567
8	559
9	565
10	572
11	576
12	579
13	557
14	498
15	575
16	574
17	569
18	567
19	564
20	556
21	559
22	567
23	576
24	577
25	570
26	569
27	565
28	559
29	568
30	564
31	554

REFUELING INFORMATION

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1. **Name of facility.** Duane Arnold Energy Center

2. **Scheduled date for next refueling shutdown.** Spring 2003

3. **Scheduled date for restart following refueling.** Spring 2003

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.** 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. **Current fuel assemblies inventory**

	Number of Fuel Assemblies	Projected date of last refueling that can be discharged (after allowing margin for maintenance of continuous full-core discharge capability)
Installed into reactor core	368	
Discharged from core to Spent Fuel Storage Pool	1912	
Scheduled for transfer to Dry Fuel Storage November 2003	610	
Installed capacity of Spent Fuel Storage Pool	2411	2008
Licensed capacity of Spent Fuel Storage Pool (with re-racking)	2829	2014
Licensed capacity of Spent Fuel Storage Pool and Cask Pool (with reracking)	3152	

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UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: July 2002

No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	Cause
6	7/13 – 14/2002	S	0 (3.80 Effective-Full-Power-Hours)	B	5		Sequence Exchange

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)

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Monthly Operational Overview for July 2002

At the beginning of July, the DAEC had continuously operated thirty-seven days.

On July 13th between 21:02 and midnight, operators reduced power from 1790 to 1030 MWth to perform a sequence exchange. Operators began increasing power at 03:30, and full power was achieved at 14:15 on July 14th.

Power was reduced to 1692 MWth on July 15th from 00:37 to 01:34 to adjust load line.

Power was reduced to 1700 MWth on July 16th from 04:31 to 05:37 for a control rod adjustment.

On July 20th at 17:13, operators reduced power to 1765 MWth for three hours when main condenser back pressure increased due to near record high wet-bulb temperatures. At 20:00, following a drop in ambient temperature, the condenser backpressure decreased, and full-power was restored.

The DAEC operated continuously at full-power for the remainder of the month.

Following is the allocation of production and losses:	Electrical Output MWe	Capacity Factor % of 614 MWe (Target Output)	Full Power Equivalent Hours (FPHeq)
Net Electric Output	**564.94**	**92.01%**	**684.59**
Plant House Loads (while on-line)	**+32.11**	**+5.23%**	**38.90**
Subtotal: Gross Electric Output	**597.05**	**97.24%**	**723.49**
Capacity Losses (departures from full thermal power):			
Sequence Exchange 7/13 21:02 - 7/14 14:15	3.14	0.51%	3.80
CRD Adjustments 7/15 00:37 - 01:34 & 7/16 04:31 - 05:37	0.02	0.00%	0.02
High Condenser Back Pressure 7/20 17:13 - 20:35	0.12	0.02%	0.14
Maintain Margin to 1790 Administrative MWth Limit	0.34	0.06%	0 41
Efficiency Losses (occur even at full thermal power):			
Unidentified (residual)	(0.24)	(0.04%)	(0.30)
-/+ Seasonal Effects (i.e., hot weather decrease)	13.57	2.21%	16.44
Subtotal: On-line Losses (Capacity, Efficiency, and Weather):	**16.95**	**2.76%**	**20.51**
Off-Line Losses: (none)	**0.00**	**0.00%**	**0.00**
Total: Target Electric Output, %, # of clock-hours	**614.00**	**100.00%**	**744.00**

On July 9th, the Containment Atmosphere Dilution (CAD) system Nitrogen Storage Inventory indication went below the Technical Specification (TS) minimum limit of 67,000 scf. The operator then re-pressurized the system to above the TS limit. Subsequent investigation found that a surveillance, previously performed that day, had left CAD nitrogen inventory near the 67,000 scf limit. The functional check of the CAD system had used a portion of the CAD nitrogen inventory by actually flowing nitrogen through a test rig. There were no actual safety consequences nor was there any impact on public health and safety as a result of this event. The event was reported under 50.72 (b)(3)(v)(D). (Event Notification #39049).

Licensing Action Summary:

Plant Availability:	100%	Unplanned Auto Scrams (while critical) this month:	0
Number of reportable events:	1	Unplanned Auto Scrams (while critical) last 12 months:	0
		Main Steam Safety/Relief Valve Challenges this month:	0