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

Operated by Nuclear Management Company, LLC

June 14, 2002

NG-02-0476

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
May 2002 Monthly Operating Report
File: A-118d

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for May 2002. 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,

Rob Anderson
Plant Manager-Nuclear

RA/RBW

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IE24

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CTS Project

OPERATING DATA REPORT

DOCKET NO: 50-331
DATE: 06-14-2002
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: May 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

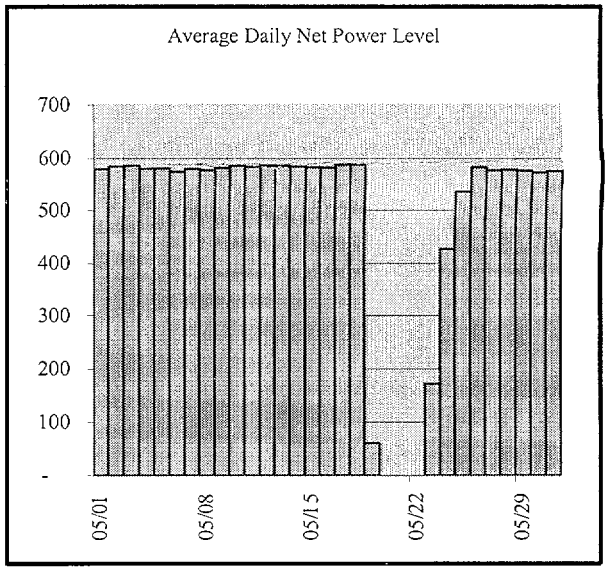
6. Maximum Dependable Capacity (Gross MW_e MDC): 593.1

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



		May-02	2002	Cumulative
11.	Hours in Reporting Period	744.0	3,623.0	239,567.0
12.	Number of Hours Reactor Was Critical	666.7	3,439.7	189,420.2
13.	Reactor Reserve Shutdown Hours	0.0	0.0	192.8
14.	Hours Generator On-Line	651.8	3,398.8	185,323.7
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1,125,608.7	5,928,266.4	270,426,896.2
17.	Gross Electrical Energy Generated (MWH)	383,743.0	2,038,853.0	90,773,070.6
18.	Net Electrical Energy Generated (MWH)	363,374.6	1,930,297.1	85,305,923.1
19.	Unit Service Factor	87.6%	93.8%	77.4%
20.	Unit Availability Factor	88.0%	93.8%	77.4%
21.	Unit Capacity Factor (Using MDC Net)	86.4%	94.9%	69.5%
22.	Unit Capacity Factor (Using DER Net)	84.0%	92.3%	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 May 2002

Day	Average Daily Power Level (MWe-Net)
1	579
2	585
3	586
4	580
5	580
6	573
7	578
8	576
9	581
10	585
11	583
12	586
13	586
14	584
15	582
16	581
17	587
18	586
19	61
20	0
21	0
22	0
23	171
24	427
25	536
26	582
27	577
28	578
29	576
30	572
31	575

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	
Installed capacity of Spent Fuel Storage Pool	2411	2001
Licensed capacity of Spent Fuel Storage Pool (with re-racking)	2829	2007
Licensed capacity of Spent Fuel Storage Pool and Cask Pool (with reracking)	3152	2011

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UNIT SHUTDOWNS AND POWER REDUCTIONS
REPORT MONTH: May 2002

No.	Date	Type (1)	Duration (Hours)	Reason (2)	Method of Shutting Down Reactor (3)	Licensee Event Report #	Cause
4	05/19 11:53 - 05/23 08:04	S	92.18 (111.0 Effective-full-power-hours-equivalent)	B	1		Condenser Tube Leak Repair
5	05/24 00:15 - 05/24 13:58	F	0 (4.8 Effective-full-power-hours-equivalent)	B	5		CV-1056 weld repair

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 May 2002

From the beginning of the month until May 18th, the DAEC operated nearly continuously at full power except for brief power reductions to perform a control rod drive adjustment on May 17th at 15:00 and a control rod drive exercise at 23:30. At 23:39 on May 18th, as previously arranged with the load dispatcher, the plant commenced an orderly shutdown to perform an elective repair of a condenser tube leak. The repair was scheduled to take advantage of a period of relatively slack grid demand in order to pre-empt a possible subsequent forced outage from occurring later during the summer.

The generator was removed from the grid at 11:53 on May 19th, and a manual scram was initiated and the plant mode switch placed in "Shutdown" at 14:39. Following the opening of the condenser waterboxes, isolation of the tube leak, and performance of pre-planned outage workscope, the reactor was taken critical May 22nd at 19:59 and the main generator synchronized to the grid on May 23rd at 08:04. During the outage the reactor was sub-critical 77.3 hours and the generator off-line 92.2 hours.

On May 24th from 00:15 to 13:58, reactor power was lowered with recirculation flow from 83% to 63% to allow an unplanned weld repair to be performed on CV-1056 (MSR Drain tank 1T-92A drain to FW heater 1E-6A). Following the repair and control rod adjustments, full operating reactor power (1790 MWth) was achieved at 17:55 on May 25th. For the remainder of the month, except for two brief power reductions for further control rod adjustments (May 26th 03:00 – 03:41 and May 27th 01:59 – 02:22), the DAEC operated at full power.

Following is the allocation of production and losses:	Electric Output MWe	Capacity Factor % of 614* MWe (Target Output)	Full Power Equivalent Hours (FPHeq)
Net Electric Output	**488.44**	**79.55%**	**591.82**
Plant House Loads (while on-line)	**+27.38**	**+4.46%**	**33.17**
Subtotal: Gross Electric Output	**515.82**	**84.01%**	**624.99**
Capacity Losses (departures from full thermal power):	0.02	0.00%	0.03
Loadline Adjustments: 05/17 15:00 - 15:45 & 23:30 - 24:00, 05/26 03:00 - 03:41, 05/27 01:59 - 02:22			
Ramp-Down & -Up 05/18 23:30 - 05/19 11:53 & 05/23 08:04 - 05/25 17:55	17.22	2.81%	20.87
CV-1056 weld repair 05/24 00:15 - 05/24 13:58	3.94	0.64%	4.77
Maintain Margin to 1790 Administrative MWth Limit	0.19	0.03%	0.23
Efficiency Losses (occur even at full thermal power):	(0.61)	(0.10%)	(0.72)
Unidentified (residual)			
-/+ Seasonal Effects (i.e., warm weather-related MWe decreases)	1.35	0.22%	1.63
Subtotal: On-line Losses (Capacity, Efficiency, and Weather):	**22.11**	**3.60%**	**26.81**
Off-Line Losses: Condenser Tube Leak Repair 05/19 11:53 - 05/23 08:04	**76.07**	**12.39%**	**92.19**
Total: Target Electric Output, %, # of clock-hours	**614.00**	**100.00%**	**743.99**

On May 19th at 11:53, the 'A' Fuel Pool Radiation monitor failed downscale causing a PCIS (Primary Containment Isolation System) inboard group 3A isolation. The Drywell radiation monitors were immediately restored to operable status. (Telephone report to NRC per 10 CFR 50.73 pending).

Licensing Action Summary:

Plant Availability:	88%	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