

# OPERATING DATA REPORT

DOCKET NO. 050-0331  
 DATE 04-15-84  
 COMPLETED BY Ken Putnam  
 TELEPHONE 319-851-7456

## OPERATING STATUS

<p>1. Unit Name: <u>Duane Arnold Energy Center</u></p> <p>2. Reporting Period: <u>March, 1984</u></p> <p>3. Licensed Thermal Power (MWt): <u>1658</u></p> <p>4. Nameplate Rating (Gross MWe): <u>565</u></p> <p>5. Design Electrical Rating (Net MWe): <u>538</u></p> <p>6. Maximum Dependable Capacity (Gross MWe): <u>545</u></p> <p>7. Maximum Dependable Capacity (Net MWe): <u>515</u></p> <p>8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:</p> <p>_____</p> <p>_____</p> <p>9. Power Level To Which Restricted, If Any (Net MWe): <u>-</u></p> <p>10. Reasons For Restrictions, If Any: <u>-</u></p> <p>_____</p> <p>_____</p>	<p>Notes</p>
--	--------------

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744.0	2184.0	80328.0
12. Number Of Hours Reactor Was Critical	744.0	2018.6	57953.6
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	744.0	1992.9	56435.6
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1169208	3044616	70793178
17. Gross Electrical Energy Generated (MWH)	399833	1036674	23730731
18. Net Electrical Energy Generated (MWH)	377569	978578	22217169
19. Unit Service Factor	100.0%	91.3%	70.3%
20. Unit Availability Factor	100.0%	91.3%	70.3%
21. Unit Capacity Factor (Using MDC Net)	98.5%	87.0%	53.7%
22. Unit Capacity Factor (Using DER Net)	94.3%	83.3%	51.4%
23. Unit Forced Outage Rate	0.0%	8.8%	17.0%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

Surveillance outage April 13, 1984 lasting approximately 10 days to two weeks.

Refueling or mini-outage September, 1984 of a duration to be determined.

25. If Shut Down At End Of Report Period, Estimated Date of Startup: \_\_\_\_\_

8404200233 840331  
 PDR ADDCK 05000331  
 R PDR

IE24  
 1/1

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy Center

DATE 04-15-84

COMPLETED BY Kenneth S. Putnar,

TELEPHONE 319-851-7306

MONTH March 1984

DAY AVERAGE DAILY POWER LEVEL

(MWe-Net)

1	<u>511</u>
2	<u>516</u>
3	<u>513</u>
4	<u>478</u>
5	<u>512</u>
6	<u>515</u>
7	<u>514</u>
8	<u>515</u>
9	<u>515</u>
10	<u>515</u>
11	<u>491</u>
12	<u>512</u>
13	<u>515</u>
14	<u>513</u>
15	<u>512</u>
16	<u>514</u>

DAY AVERAGE DAILY POWER LEVEL

(MWe-Net)

17	<u>514</u>
18	<u>500</u>
19	<u>515</u>
20	<u>513</u>
21	<u>512</u>
22	<u>509</u>
23	<u>512</u>
24	<u>500</u>
25	<u>440</u>
26	<u>508</u>
27	<u>507</u>
28	<u>510</u>
29	<u>512</u>
30	<u>512</u>
31	<u>507</u>

#### INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

## UNIT SHUTDOWNS AND POWER REDUCTIONS

Docket No. 050-0331Unit Name Duane Arnold Energy CenterDate 4-15-84Completed by Kenneth S. PutnamTelephone 319-851-7456REPORT MONTH March, 1984

No.	Date					Licensee Event Report #			Cause & Corrective Action to Prevent Recurrence
-	NONE	-							

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-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

MAJOR SAFETY RELATED MAINTENANCE

Docket No. 050-0331  
Unit Duane Arnold Energy Center  
Date March 15, 1984  
Completed by Kenneth S. Putnam  
Telephone 319-851-7456

DATE	SYSTEM	COMPONENT	DESCRIPTION
03-01-84	ADS	Reset Switch HS-4462	Replaced Switch (LER 84-012)
03-06-84	HPCI	HV2201 Turbine Stop Valve	Replaced hydraulic oil seals in valve operator (LER 84-012)
03-27-84	Fire Protection System	IP-49 Fire Pump	Rebuilt Turbocharger, replaced head gasket
03-28-84	Fire Protection System	IP-48 Electric Fire Pump	Replaced Packing

Docket No. 050-0331  
Unit Duane Arnold Energy Ctr  
Date April 15, 1984  
Completed by Ken S. Putnam  
Telephone 319-851-7456

REFUELING INFORMATION

1. Name of facility.  
A. Duane Arnold Energy Center
2. Scheduled date for next refueling shutdown.  
A. October 1, 1984 (May be deferred until January, 1985.)
3. Scheduled date for restart following refueling.  
A. December, 1984
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?  
Yes.  
A. Reload license submittal including power uprate.  
B. Additional MAPLHGR curves for new fuel bundles being introduced for Cycle 8.
5. Scheduled date(s) for submitting proposed licensing action and supporting information.  
July, 1984
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.  
None
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.  
A. a) 368 b) 576
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies.  
A. 2050
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.  
A. 1998



Docket No. 055-0331  
Unit Duane Arnold Energy Ctr  
Date March, 1984  
Completed by Ken Putnum  
Telephone 319-851-7456

#### NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 03-01-84 Normal plant operation at 550 MWe (gross).
- 03-01-84 Surveillance testing found the "B" side ADS timer would not initiate. At 1740 hours ADS was declared inoperable commencing a 24 hour LCO as HPCI was concurrently inoperable. An unusual event was declared and a controlled power reduction initiated.

At 2230 hours repair and testing of "B" side ADS were completed cancelling the 24 hour LCO and unusual event. 7 day LCO on HPCI inoperability (begun 2-29-84) continued.

(LER 84-012)

- 03-03-84 At 2326 hours, reduction of reactor power with recirculation flow was commenced for test performance and repair work on CV-1237, extraction steam dump valve on 6A/6B feedwater heaters.
- 03-04-84 Increased reactor power after completion of repairs and tests at 0302 hours.
- 03-05-84 Cumulative exposure of certain fuel bundle nodes exceeded the exposure of current MAPLHGR curves in T.S. Section 3.12. A Technical Specification change (RTS-163) is pending.
- 03-06-84 Repairs and testing of HPCI completed. HPCI declared operable cancelling 7 day LCO at 2200 hours.
- 03-20-84 At 0120 hours, during surveillance testing, the RHR discharge piping had a momentary decrease in pressure, causing an RHR low pressure alarm.
- 03-21-84 At 1820 hours, alarms were received from ARM's on the refuel floor. The alarms were caused by a loss of a common power supply. At 2007 hours, power supply operability was restored.
- 03-24-84 Commenced dropping power at 2154 hours for heater bay inspection and inspection of turbine building operations deck.
- 03-25-84 Inspections completed, commenced increasing power at 0345 hours.
- 03-31-84 Normal plant operation at 544 MWe (gross).



Iowa Electric light and power company

DUANE ARNOLD ENERGY CENTER  
PALO, IOWA

PRINCIPAL STAFF			
RA		OPRP	<i>orig + 1</i>
D/RA		DE	
A/RA		DRMSP	
RC		DRMA	
PAO		SCS	
SGA		ML	
ENF		File	<i>la</i>

To: Routing

From: B. Miller

Subject: Concurrence with outgoing correspondence

Reference: Monthly Operating Report for March, 1984, DAEC-84-21

Concurrence with and release of the referenced document is requested.

Originator *Kenneth S. Fisher*Technical Support Supervisor *[Signature]**(minor changes → correct in final version after  
Reviews) 4/11/84*C. Micks • Department Supervisor *OK Micks. (same as above)*

Department Supervisor \_\_\_\_\_

S. Vingrist • A.P.S.-Technical Support *[Signature]*R. Hammer • A.P.S.-Operations *[Signature]*

Ops. Comm. Chairman \_\_\_\_\_

WM/kp

APR 16 1984

Iowa Electric Light and Power Company

April 15, 1984

DAEC-84-209

Director, Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

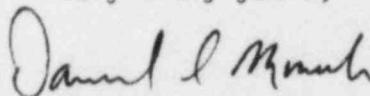
Attn: Document Control Desk

Subject: Duane Arnold Energy Center  
Docket No. 50-331  
Op. License DPR-49  
March, 1984 Monthly Operating Report

Dear Sirs:

Please find enclosed 12 copies of the Duane Arnold Energy Center Monthly Operating Report for March, 1984. The report has been prepared in accordance with the guidelines of Regulatory Guide 1.16 and distribution has been made in accordance with DAEC Technical Specifications, Appendix A, Section 6.11.1.c and Regulatory Guide 10.1.

Very truly yours,



Daniel L. Mineck  
Plant Superintendent - Nuclear  
Duane Arnold Energy Center

DLM/KSP/kp\*  
Enclosures  
File A-118d, TE-5

cc: Director, Office of Inspection  
and Enforcement  
U. S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137 (1)

Director, Office of Management and  
Program Analysis  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555 (1)

U. S. Nuclear Regulatory Commission  
ATTN: Mr. M. Thadani  
Phillips Bldg.  
Washington, D. C. 20555

INPO Records Center  
1100 Circle 75 Parkway  
Suite 1500  
Atlanta, GA 30339

Duane Arnold Energy Center • P.O. Box 351 • Cedar Rapids, Iowa 52406 • 319/851-7611

Mr. Phillip Ross  
U. S. Nuclear Regulatory Commission  
Maryland National Bank Bldg.  
Washington, D. C. 20555

NRC Resident Inspector

Mr. Dennis Murdock  
Central Iowa Power Cooperative  
Marion, IA 52302

Mr. George Toyne, Gen. Mgr.  
Corn Belt Power Cooperative  
Box 508  
Humboldt, IA 50548

TE24  
11