

# OPERATING DATA REPORT

DOCKET NO. 050-0331

DATE 03-15-84

COMPLETED BY Kenneth S. Putnam

TELEPHONE 319-851-7456

## OPERATING STATUS

Notes

1. Unit Name Duane Arnold Energy Center
2. Reporting Period February, 1984
3. Licensed Thermal Power (Mwt): 1658
4. Nameplate Rating (Gross MWe): 565
5. Design Electrical Rating (Net MWe): 538
6. Maximum Dependable Capacity (Gross MWe): 545
7. Maximum Dependable Capacity (Net MWe): 515
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since the Last Report, Give Reasons:
9. Power Level to Which Restricted, if Any (Net MWe):
10. Reasons For Restrictions, if Any:

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	696.0	1440.0	79,584.0
12. Number of Hours Reactor Was Critical	696.0	1274.6	57,209.6
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	696.0	1248.9	55,691.6
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,098,451	1,875,408	69,623,970
17. Gross Electrical Energy Generated (MWH)	374,414	636,841	23,320,898
18. Net Electrical Energy Generated (MWH)	353,529	601,009	21,839,600
19. Unit Service Factor	100%	86.7%	70.0%
20. Unit Availability Factor	100%	86.7%	70.0%
21. Unit Capacity Factor (Using MDC Net)	98.6%	81.0%	53.3%
22. Unit Capacity Factor (Using DER Net)	94.4%	77.6%	51.0%
23. Unit Forced Outage Rate	0%	13.3%	17.2%
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

25. if Shut Down At End Of Report Period, Estimated Date of Startup:

\* Turbine Rating: 565.7 MWe

Generator Rating: 663.5 (MVA) x .90 (Power Factor) = 597 MWe

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PDR ADOCK 05000331  
R PDR

1824

(9/77)

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331UNIT Duane Arnold Energy CenterDATE March 15, 1984COMPLETED BY Kenneth S. PutnamTELEPHONE 319-851-7456MONTH February 84

## DAY AVERAGE DAILY POWER LEVEL

(MWe-Net)

1	<u>513</u>
2	<u>510</u>
3	<u>510</u>
4	<u>512</u>
5	<u>504</u>
6	<u>507</u>
7	<u>510</u>
8	<u>510</u>
9	<u>509</u>
10	<u>511</u>
11	<u>498</u>
12	<u>484</u>
13	<u>510</u>
14	<u>511</u>
15	<u>505</u>
16	<u>508</u>

## DAY AVERAGE DAILY POWER LEVEL

(MWe-Net)

17	<u>510</u>
18	<u>467</u>
19	<u>496</u>
20	<u>512</u>
21	<u>510</u>
22	<u>511</u>
23	<u>510</u>
24	<u>511</u>
25	<u>513</u>
26	<u>500</u>
27	<u>515</u>
28	<u>514</u>
29	<u>515</u>
30	<u>      </u>
31	<u>      </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. 050-0331

Unit Name Duane Arnold Energy Center

Date March 15, 1984

Completed by Kenneth S. Putnam

Telephone 319-851-7456

REPORT MONTH February, 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)

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Exhibit 1-Same Source

(9/77)

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
02-22-84	RHR Service Water	IP22C, IP22A RHR Service Water Pumps	Pumps repacked, new rings, system inspected
02-29-84	Reactor Building-Suppression Pool Vacuum Breakers	Inflatable seals on CV4304 and CV4305	Replaced and adjusted actuator bolts.
02-29-84	HPCI	HV2201 Turbine Stop Valve	Replaced hydraulic oil seals in valve operator (LER 84-012 pending).

Docket No. 050-0331  
Unit Duane Arnold Energy Ctr  
Date March 15, 1984 84  
Completed by Kenneth 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. Fall, 1984
3. Scheduled date for restart following refueling.  
A. Fall 1984
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?  
None currently identified.
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.  
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 15, 1984  
Completed by Kenneth S. Putnam  
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#### NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 02-01-84 Normal plant operation at 549 MWe - Gross.
- 02-02-84 At 1605 hours, RM 4101A declared operable. 7-day LCO cancelled.
- 02-04-84 At 2200 hours, the HPCI steam supply was isolated in response to a spurious electrical spike in the HPCI auto/isolation signal. HPCI steam supply was reset at 2201 hours. (LER 84-010).
- 02-05-84 At 1043 hours, low inlet air temperature caused isolation of control building ventilation and initiation of the intake "B" standby filter unit (SFU). (LER 84-011).
- 02-09-84 At 0814 hours a 24 hour LCO was commenced due to the results of surveillance testing of the main steam isolation valve - leakage control system. The electrical current to 3 of the 4 heaters used to prevent condensate buildup in steam drain lines was slightly lower than specified in the STP. Two repeated tests found the current satisfactory. After engineering review concluded that the system was operational and fully capable of performing its function, the LCO was cancelled.
- 02-14-84 At 1500 hours surveillance testing of a pressure differential instrument switch measuring delta P between the core spray sparger and the reactor pressure vessel found PDIS-2139 slightly out of calibration. Redundant switch PDIS-2119 was in calibration and fully operable.
- 02-24-84 At 0810 hours, the "B" Emergency Service Water (ESW) was declared inoperable when an auto vent valve would not seat. The ESW loop was declared inoperable and an LCO commenced. The vent valve failure resulted in approximately a 10% reduction in ESW pump flow.
- At 1216 hours, the "B" ESW pump was started following vent valve maintenance and the proper operation of the auto vent was verified. At 1320 hours, the "B" ESW loop was declared operable cancelling the LCO.
- 02-29-84 During surveillance testing of HPCI, a steam stop valve failed to open in the required time after the Aux. oil pump was started. In response, at 1200 hours, HPCI was declared inoperable and a 7 day LCO was commenced. (LER 84-012 pending).

Normal Plant operation at 550 MWe-Gross.

Iowa Electric Light and Power Company

March 15, 1984

DAEC-84-151

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

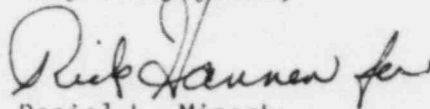
Attn: Document Control Desk

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

Dear Sirs:

Please find enclosed 12 copies of the Duane Arnold Energy Center Monthly Operating Report for February, 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/pv\*  
Enclosures  
File A-118d, TE-5

cc: Director, Office of Inspection  
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