

# OPERATING DATA REPORT

DOCKET NO. 050-0331

DATE 10-14-83

COMPLETED BY Matt Andersen

TELEPHONE 319-851-7308

## OPERATING STATUS

1. Unit Name Duane Arnold Energy Center
2. Reporting Period September, 1983
3. Licensed Thermal Power (MWt): 1658
- \*4. Nameplate Rating (Gross MWe): 565 (Turbine Rating)
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:

Notes

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	720.0	6551.0	75935.0
12. Number of Hours Reactor Was Critical	720.0	3995.3	54251.6
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	720.0	3855.1	52790.3
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	879727.2	4983782.4	65353302.4
17. Gross Electrical Energy Generated (MWH)	296968.0	1672367.0	21887284.0
18. Net Electrical Energy Generated (MWH)	277613.5	1564415.9	20478688.3
19. Unit Service Factor	100.0%	58.8%	69.5%
20. Unit Availability Factor	100.0%	58.8%	69.5%
21. Unit Capacity Factor (Using MDC Net)	74.0%	46.4%	52.4%
22. Unit Capacity Factor (Using DER Net)	71.7%	44.4%	50.1%
23. Unit Forced Outage Rate	0.0%	14.5%	17.6%

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

Maintenance Shutdown 10-1-83 to 10-17-83

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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## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331UNIT Duane Arnold Energy CenterDATE October 14, 1983COMPLETED BY Matt AndersenTELEPHONE 319-851-7308MONTH September, 1983

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>488</u>
2	<u>472</u>
3	<u>406</u>
4	<u>394</u>
5	<u>457</u>
6	<u>514</u>
7	<u>513</u>
8	<u>498</u>
9	<u>492</u>
10	<u>484</u>
11	<u>354</u>
12	<u>364</u>
13	<u>389</u>
14	<u>384</u>
15	<u>369</u>
16	<u>392</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>388</u>
18	<u>389</u>
19	<u>386</u>
20	<u>394</u>
21	<u>394</u>
22	<u>393</u>
23	<u>401</u>
24	<u>400</u>
25	<u>393</u>
26	<u>389</u>
27	<u>328</u>
28	<u>382</u>
29	<u>383</u>
30	<u>383</u>
31	<u>N/A</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 October 14, 1983

REPORT MONTH September, 1983

Completed by Matt Andersen

Telephone 319-851-7308

No.	Date	Type <sup>1</sup>	Duration (hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
11	830911	S	0	F	4	N/A	N/A	N/A	Reactor power limited to 75% due to "A" steam line being isolated.

1 F: Forced

S: Scheduled

2

Reason:

A-Equipment Failure(Explain)

B-Maintenance or Test

C-Refueling

D-Regulatory Restriction

E-Operator Training &amp; License Examination

F-Administrative

G-Operational Error(Explain)

H-Other(Explain)

3

Method:

1-Manual

2-Manual Scram.

3-Automatic Scram.

4-Other(Explain)

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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)

Docket No. 050-0331  
Unit Duane Arnold Energy Ctr  
Date October 14, 1983  
Completed by Matt Andersen  
Telephone 319-851-7308

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

MAJOR SAFETY RELATED MAINTENANCE

Docket No. 050-0331  
 Unit Duane Arnold Energy Center  
 Date October 14, 1983  
 Completed by Matt Andersen  
 Telephone 319-851-7308

DATE	SYSTEM	COMPONENT	DESCRIPTION
9-4-83	RCIC	M0-2401	Valve operator torque switch replaced (RO 83-032)
9-6-83	HPCI/RCIC	LIS-4531, LIS-4533	Switches recalibrated (RO 83-035)
9-7-83	RPS	C71A-K12E	HFA relay replaced (RO 83-034)
9-8-83	HPCI	M0-2318	Valve yoke was repaired and tightened (RO 83-033)
9-10-83	Primary Containment Isolation System	A71B-K1B	HFA relay replaced (RO 83-036)
9-12-83	CRD Hydraulic	1P-209B	Complete rotating element, radial and thrust bearings and seals replaced
9-13-83	HPCI	FY-2309	Square root convertor replaced
9-15-83	Neutron Monitoring	"A" SRM	Amplifier replaced
9-20-83	RHR Service Water	1P-22B, 1P-22D	Impeller on both pumps adjusted for greater pump flow
9-22-83	HPCI	1P-233	Vacuum pump motor commutator resurfaced (RO 83-038 pending) Internal check valve repaired
9-28-83	Various	Snubbers	6 Pacific Scientific Snubbers were identified for replacement during upcoming October outage
9-30-83	Neutron Monitoring	"B" RBM	Repaired wiring discrepancies in RBM "B" circuitry. (RO 83-037)

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# NARRATIVE SUMMARY OF OPERATING EXPERIENCE

9-1-83 Normal plant operation at 492 MWe.

9-2-83 At 2239 hours, commenced reducing power approximately 3 MWe/min.

At 2312 hours, started control rod swap, reactor core flow <20 M#/hr.

At 2340 hours, completed control rod swap, holding power at 50%.

9-3-83 At 0123 hours, increasing power at approximately 2 MWe/min.

At 1105 hours, HPCI minimum flow return to torus line valve MO-2318 indication intermittently showed the valve was open. HPCI declared inop and 7-day LCO commenced.

(RO 83-033)

9-4-83 At 1532 hours, during daily testing for HPCI inop, RCIC outboard steam isolation valve MO-2401 would not fully close. RCIC declared inop and 24 hour LCO commenced due to HPCI already being inop.

(RO 83-032)

At 2333 hours, RCIC system declared operable due to valve MO-2401 successfully repaired.

9-5-83 At 0103 hours, 24 hour LCO cancelled due to HPCI inop package being completed satisfactory, HPCI 7-day LCO re-entered.

9-6-83 During surveillance testing, reactor 10-10 water level switches, LIS-4531, 4533, tripped in nonconservative direction.

(RO 83-035)

During APRM scram instrument functional tests, HFA-type relay C71A-K12E would not drop-out when de-energized by tripping APRM-E. APRM-E was declared inop and RPS-A was manually tripped (half scram).

(RO 83-034)

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NARRATIVE SUMMARY OF OPERATING EXPERIENCE

9-8-83 At 1131 hours, HPCI system declared operable, end of 7-day LCO.

9-9-83 At 1840 hours, a special visual inspection of HFA relays discovered relay A71-K1B (reactor 10-10-10 water level) deteriorated. 1/2 group 1 isolation inserted. Relay was placed in deenergized tripped condition and LCO terminated.

(RO 83-036)

9-11-83 Plant in normal operation at 415 MWe.

Power limited to 75% due to "A" steam line being isolated.

9-13-83 At 2131 hours, drywell equipment drain line (containment isolation) valve CV-3729 did not close when given a manual closure signal.

(RO 83-040)

9-15-83 At 1205 hours, "B" rod block monitor declared inop, 7-day LCO commenced.

(RO 83-037)

9-18-83 Normal plant operation at 386 MWe.

9-20-83 At 1133 hours, HPCI system declared inop due to failure of HPCI vacuum pump motor, commenced 7-day LCO.

(RO 83-038  
pending)

9-23-83 At 1649 hours, HPCI system declared operable ending 7-day LCO.

9-26-83 Normal plant operation at 405 MWe.

9-30-83 Normal plant operation at 386 MWe.



Iowa Electric Light and Power Company

October 14, 1983

DAEC-83- 798

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

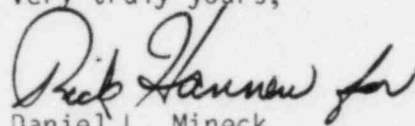
Attn: Document Control Desk

Subject: Duane Arnold Energy Center  
Docket No. 50-331  
Op. License DPR-49  
September, 1983 Monthly Operating Report

Dear Sirs:

Please find enclosed 12 copies of the Duane Arnold Energy Center Monthly Operating Report for September, 1983. 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/MWA/pf\*  
Enclosures  
File A-1186, TE-5

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