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ACCESSION NBR: 9110230056 DOC. DATE: 91/09/30 NOTARIZED: NO DOCKET #  
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 RECIP. NAME RECIPIENT AFFILIATION

DAVIS, A. B. Region 3 (Post 820201)

SUBJECT: Monthly operating rept for Sept 1991 for Duane Arnold Energy  
 Ctr. W/911015 ltr.

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Iowa Electric Light and Power Company

October 15, 1991  
DAEC-91-0794

Mr. A. Bert Davis  
Regional Administrator  
Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

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

Dear Mr. Davis:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for September 1991. The report has been prepared in accordance with the guidelines of NUREG-0020 and distribution has been made in accordance with DAEC Technical Specifications, Section 6.11.1.c.

Very truly yours,

*David L. Wilson*

David L. Wilson  
Plant Superintendent - Nuclear

DLW/HT/pwj+  
Enclosures  
File A-118d

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IE24  
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# OPERATING DATA REPORT

DOCKET NO. 050-0331  
DATE 10-15-91  
COMPLETED BY Hai Tran  
TELEPHONE (319) 851-7491

## OPERATING STATUS

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: September 1991
3. Licensed Thermal Power (MWt): 1658
4. Nameplate Rating (Gross MWe): 565 (Turbine)
5. Design Electrical Rating (Net MWe): 538
6. Maximum Dependable Capacity (Gross MWe): 565
7. Maximum Dependable Capacity (Net MWe): 538
8. If Changes Occur in Capacity Ratings (Items Number 3 through 7) Since the Last Report, Give Reasons: N/A

Notes

9. Power Level to Which Restricted, If Any (Net MWe): N/A
10. Reasons for Restrictions, If Any: N/A

	This Month	Yr-to-Date	Cumulative
11. Hours in Reporting Period	<u>720.0</u>	<u>6551.0</u>	<u>146063.0</u>
12. Number of Hours Reactor Was Critical	<u>720.0</u>	<u>6068.5</u>	<u>106579.3</u>
13. Reactor Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>192.8</u>
14. Hours Generator On-Line	<u>720.0</u>	<u>5990.9</u>	<u>103699.1</u>
15. Unit Reserve Shutdown Hours	<u>.0</u>	<u>.0</u>	<u>.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1182408.0</u>	<u>9730346.4</u>	<u>139451580.4</u>
17. Gross Electrical Energy Generated (MWH)	<u>392160.0</u>	<u>3198035.0</u>	<u>46751926.0</u>
18. Net Electrical Energy Generated (MWH)	<u>369256.7</u>	<u>3004244.2</u>	<u>43821945.4</u>
19. Unit Service Factor	<u>100.0</u>	<u>91.5</u>	<u>71.0</u>
20. Unit Availability Factor	<u>100.0</u>	<u>91.5</u>	<u>71.0</u>
21. Unit Capacity Factor (Using MDC Net)	<u>95.3</u>	<u>85.2</u>	<u>57.8</u>
22. Unit Capacity Factor (Using DER Net)	<u>95.3</u>	<u>85.2</u>	<u>55.8</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>3.6</u>	<u>13.3</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of each: <u>Refuel Outage 11, March 1, 1992, 60 days</u> )			
25. If Shutdown at End of Report Period, Est. Date of Startup: <u>N/A</u>			

(9/77)

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-033I  
DATE 10-15-91  
COMPLETED BY Hai Tran  
TELEPHONE (319) 851-7491

MONTH September 1991

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	505.0
2	515.0
3	509.0
4	519.0
5	521.0
6	510.0
7	511.0
8	497.0
9	505.0
10	513.0
11	512.0
12	509.0
13	508.0
14	506.0
15	488.0

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

16	515.0
17	519.0
18	521.0
19	527.0
20	527.0
21	524.0
22	509.0
23	528.0
24	521.0
25	521.0
26	525.0
27	527.0
28	469.0
29	518.0
30	506.0
31	N/A

REFUELING INFORMATION

DOCKET NO. 50-0331  
DATE 10-15-91  
COMPLETED BY Hai Tran  
TELEPHONE (319) 851-7491

1. Name of facility.
  - a. Duane Arnold Energy Center
2. Scheduled date for next refueling shutdown.
  - a. March 1, 1992
3. Scheduled date for restart following refueling.
  - a. May 1, 1992
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

Yes
5. Scheduled date(s) for submitting proposed licensing action and supporting information.

RTS-218: Elimination of scram and Main Steam Isolation Valve (MSIV) isolation on main steam line radiation monitor, submitted on August 30, 1991.

RTS-242: Removal of containment component lists, submitted on September 20, 1991.
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. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.
  - a. 368
  - b. 1048
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 - Licensed Capacity or
  - b. 1898 under the presently installed storage rack capacity.
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.
  - a. 2000 - Licensed Capacity or
  - b. 1997 under the presently installed storage rack capacity.

## MAJOR/SAFETY RELATED MAINTENANCE

Docket No.: 050-0331  
Unit: Duane Arnold Energy Center  
Date: 10-15-91  
Completed By: Hai Tran  
Telephone: (319) 851-7491

DATE	SYSTEM	COMPONENT	DESCRIPTION
09-18-91	Accident Monitoring Instrumentation	Foxboro Instruments	Various dummy equipment was installed in four Foxboro instrument nests to match the Foxboro seismic qualification report test configuration.
09-20-91	Feedwater System	N/A	A radioactive tracer test on the feedwater flow measurement system was conducted to confirm flow measurement accuracy. Preliminary data examination and independent review have indicated the instrumentation is calibrated conservatively.

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: September 1991

Docket No.: 050-0331

Unit: Duane Arnold Energy Center

Date: 10-15-91

Completed By: Hai Tran

Telephone: (319) 851-7491

No.	Date	Type(1)	Duration (Hours)	Reason(2)	Method of Shutting (3) Down Reactor	Licensee Event Report #	System Code (4)	Comp. Code (5)	Cause
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-Continued  
5-Reduced Load  
9-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

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

DOCKET NO. 050-0331  
DATE 10-15-91  
COMPLETED BY Hai Tran  
TELEPHONE (319) 851-7491

- 09-01-91 The plant was operating at 98.1% of rated thermal power delivering 505 MWe to the grid. There was one 10 CFR 50.73 reportable event during the month.
- 09-18-91 The plant was operating at approximately 100% power. It was found that four Foxboro nests which house class 1E component cards were not configured to meet all of the Foxboro configuration requirements. Upon the discovery, dummy loads, slots, and rubber bumpers were installed in order to match the qualification report test configuration. The corrective action was complete on the day it was discovered. Further review of qualification is continuing.
- LER 91-10 (pending)
- 09-20-91 A radioactive tracer test on the feedwater flow measurement system was conducted. The purpose of this test is to provide an independent verification of feedwater flow in order to assure the installed feedwater flow instrumentation is accurate. Preliminary data examination and independent review have indicated the instrumentation is calibrated conservatively.
- 09-30-91 The plant was operating at 97.6% of rated thermal power delivering 506 MWe to the grid.