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 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: Monthly operating rept for Sept 1989 for Duane Arnold Energy Ctr. W/891015 ltr.

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Iowa Electric Light and Power Company

October 15, 1989

DAEC-89-0638

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 1989 Monthly Operating Report

Dear Sirs:

Please find enclosed the Duane Arnold Energy Center Monthly Operating Report for September, 1989. 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, Section 6.11.1.c.

Very truly yours,

Rick L. Hannen 10-13-89

Rick L. Hannen
Plant Superintendent - Nuclear

RLH/LDM/gt
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OPERATING DATA REPORT

DOCKET NO. 050-0331
 DATE 10-15-89
 COMPLETED BY Lonnie Miller
 TELEPHONE (319) 851-7204

OPERATING STATUS

Notes

1. Unit Name: Duane Arnold Energy Center
2. Reporting Period: September 1989
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

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>128543.0</u>
12. Number of Hours Reactor Was Critical	<u>340.3</u>	<u>5628.5</u>	<u>92577.0</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>192.8</u>
14. Hours Generator On-Line	<u>340.2</u>	<u>5341.2</u>	<u>89982.8</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>562507.2</u>	<u>8119426.2</u>	<u>118159094.8</u>
17. Gross Electrical Energy Generated (MWH)	<u>191164.8</u>	<u>2751707.0</u>	<u>39683933.0</u>
18. Net Electrical Energy Generated (MWH)	<u>178264.4</u>	<u>2538575.1</u>	<u>37161861.1</u>
19. Unit Service Factor	<u>47.3</u>	<u>81.5</u>	<u>70.0</u>
20. Unit Availability Factor	<u>47.3</u>	<u>81.5</u>	<u>70.2</u>
21. Unit Capacity Factor (Using MDC Net)	<u>46.0</u>	<u>72.0</u>	<u>53.7</u>
22. Unit Capacity Factor (Using DER Net)	<u>46.0</u>	<u>72.0</u>	<u>53.7</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>9.9</u>	<u>14.0</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of each): <u>None</u>			
25. If Shutdown at End of Report Period, Est. Date of Startup: <u>10-20-89</u>			

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331
DATE 10-15-89
COMPLETED BY Lonnie Miller
TELEPHONE (319) 851-7204

MONTH August 1989

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>530</u>
2	<u>536</u>
3	<u>510</u>
4	<u>517</u>
5	<u>527</u>
6	<u>520</u>
7	<u>529</u>
8	<u>524</u>
9	<u>535</u>
10	<u>503</u>
11	<u>533</u>
12	<u>537</u>
13	<u>533</u>
14	<u>523</u>
15	<u>146</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

16	<u>0</u>
17	<u>0</u>
18	<u>0</u>
19	<u>0</u>
20	<u>0</u>
21	<u>0</u>
22	<u>0</u>
23	<u>0</u>
24	<u>0</u>
25	<u>0</u>
26	<u>0</u>
27	<u>0</u>
28	<u>0</u>
29	<u>0</u>
30	<u>0</u>
31	<u>0</u>

REFUELING INFORMATION

DOCKET NO. 050-0331
DATE 10-15-89
COMPLETED BY Lonnie Miller
TELEPHONE (319) 851-7204

1. Name of facility.
 - a. Duane Arnold Energy Center

2. Scheduled date for next refueling shutdown.
 - a. April, 1990

3. Scheduled date for restart following refueling.
 - a. July, 1990

4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

Cycle 10/11 reload submittal.

5. Scheduled date(s) for submitting proposed licensing action and supporting information. 12/31/89

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.

We will be getting GE 10 fuel.

7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.
 - a. 368
 - b. 944

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.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: September 1989

Docket No.: 050-0331
 Unit: Duane Arnold Energy Center
 Date: 10-15-89
 Completed By: Lonnie Miller
 Telephone: (319) 851-7204

No.	Date	Type(1)	Duration (Hours)	Reason(2)	Method of Shutting (3) Down Reactor	Licensee Event Report #	System Code (4)	Comp. Code (5)	Cause
1	9-15-89	S	379.8	B	1	89-013	N/A	N/A	Reactor was taken off line to test the Main Steam Isolation Valves for leakage and to perform maintenance.

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 I-
 Same Source

MAJOR/SAFETY RELATED MAINTENANCE

Docket No.: 050-0331
 Unit: Duane Arnold Energy Center
 Date: 10-15-89
 Completed By: Lonnie Miller
 Telephone: (319) 851-7204

DATE	SYSTEM	COMPONENT	DESCRIPTION
09/15/89	Main Steam Isolation	Valves	The Main Steam Isolation Valves were all tested. Minor repairs were made.
09/20/89	Secondary Containment	Ductwork	A hole was discovered in a vent shaft which made past operability test results questionable. The hole was repaired and the test was changed so this type of failure could be detected in the future.
09/19/89	EQ Inspections	EQ Components	Electrical connections were identified which did not meet qualifications.

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

DOCKET NO. 050-0331
DATE 10-15-89
COMPLETED BY Lonnie Miller
TELEPHONE (319) 851-7204

- 09-01-89 At the beginning of the month the plant was operating at 99.8% thermal power with 529 MWe-net being supplied by the plant for customers connected to the grid. There was one reportable event during the month and one report being written for information only.
- 09-05-89 At 0823 hours the plant entered a 7 day Limiting Condition for Operation (LCO). Minor modifications were made to the Emergency Service Water system. The LCO was cancelled at 1612 hours the same day.
- 09-05-89 At 0853 hours the plant entered a 7 day LCO for planned maintenance on the output breaker for the "A" Diesel Generator. The LCO was cancelled at 1612 hours the same day.
- 09-11-89 At 1250 hours the plant entered a 7 day LCO for a planned maintenance inspection of MO-2009. The LCO was cancelled at 1454 hours the same day.
- 09-15-89 At 0414 hours the turbine was taken off-line in preparation for mid-cycle testing of the Main Steam Isolation Valves. At 0419 hours the reactor was taken subcritical.
- 09-16-89 After initial testing was completed, it was determined that two valves failed their as-found leakage test. Both of these valves, which were outboard valves, were repaired retested. In the course of performing the as-left test on these valves, it was discovered that one inboard valve was leaking enough that it was elected to have work performed on it. A design change has been prepared with General Electric to modify the Main Steam Isolation Valve internals and the operators during the Cycle 10/11 refueling outage. A Licensee Event Report is being prepared to report this event.
- LER 89-013 (Pending)
- 09-19-89 Electrical connections were found that did not meet qualifications.
- 09-20-89 An engineer discovered a rip in the reactor building vent shaft in the exhaust fan room. This damage, in effect, made the Secondary Containment test invalid. Secondary Containment was declared inoperable and the damage was repaired. After various small leaks were repaired and calibration was done on one of the instruments, the Secondary Containment system was returned to service. In addition, changes were made to the operability test to ensure vent shaft degradation would be detected.
- LER 89-012 (Pending)
- 09-30-89 At the end of the month the plant remained shutdown due to Environmental Qualification concerns.