## OPERATING DATA REPORT

DOCKET NO. 050-0331

DATE 7-15-84

COMPLETED BY Ken S.Putnam

TELEPHONE 319-851-7456

1.	Unit Name Duane Arnold Energy Center	Notes						
	Reporting Period June, 1984							
	Licensed Thermal Power (MW+): 1658							
	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.	8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since the Last Report, Give Reasons:							
	Power Level to Which Restricted, If Any (Net Mw Reasons For Restrictions, If Any:							
		This Month	Yr-to-Date	Cumulative				
11.	Hours In Reporting Period	720.0	4367.0	82511.0				
12.	Number of Hours Reactor Was Critical	295.9	3028.5	58963.5				
13.	Reactor Reserve Shutdown Hours	150.3	150.3	150.3				
14.	Hours Generator On-Line	241.5	2930.5	57373.2				
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0				
16.	Gross Thermal Energy Generated (MWH)	293287	4268656	72017219				
17.	Gross Electrical Energy Generated (MWH)	93133	1445283	24139340				
18.	Net Electrical Energy Generated (MWH)	86849	1361982	22600572				
19.	Unit Service Factor	33.5	67.1	69.5				
20.	Unit Availability Factor	33.5	67.1	69.5				
21.	Unit Capacity Factor (Using MDC Net)	23.4	60.6	53.2				
22.	Unit Capacity Factor (Using DER Net)	22.4	58.0	50.9				
23.	Unit Forced Outage Rate	35.7	20.1	17.4				
24.	Shutdowns Scheduled Over Next 6 Months (Type, D	Date, and Duration of E	Each):					
	If Shut Down At End Of Report Period Fetimates							

\* Turbine Rating: 565.7 MWe Generator Rating: 663.5 (MVA)  $\times$  .90 (Power Factor) = 597 MWe IE24

#### AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy Center

DATE 7-15-84

COMPLETED BY Ken S. Putnam

TELEPHONE 319-851-7456

MONT	H June, 1984	
YAY	AVERAGE DAILY POWER LEVEL (MW-Net)	DAY AVERAGE DAILY POWER LEVEL (MW-Not)
1	0	17258
2	0	18 271
3	0	19
4	0	20452
5	0	21 480
6	0	22 479
7	0	23 478
8	0	24470
9	0	2548
0	0	260
1	0	27 0
2	0	280
3	0	29 0
4	0	300
5	79	31 -
6	229	

### 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.

(9/77)

#### UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH June, 1984

Docket No. 050-0331 Unit Name Duane Arnold Energy Center Date 7-15-84 Completed by Ken S. Putnam Telephone 319-851-7456

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor	Licensee Event Report #	System <sub>4</sub> Code	Component <sub>5</sub>	Cause & Corrective Action to Prevent Recurrence
4	05-17-84	S	344.3	В	1	LER 84-016	ЈМ	ISV	"C" Inboard MSIV piston/main disc separation. Valve repaired. Outage prolonged due to inoperability of main generator.
5	06-25-84	F	134.2	A		LER 84-021	EK	BLO	Failure of scavenger air blower rendered "8" diesel generator inoperable.

F: Forced S: Scheduled 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)

Method:

1-Manual

2-Manual Scram.

3-Automatic Scram.

4-Other(Explain)

Exhibit G-Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-

0151)

Exhibit 1-Same Source

# MAJOR SAFETY RELATED MAINTENANCE

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

DATE	SYSTEM	COMPONENT	DESCRIPTION
06-06-84	Main Steam Lines	"C" Inboard MSIV "C" Outboard MSIV	Completed repairs and inspections Initiated May 17, 1984. (LER 84-016)
		"B" Inboard MSIV	
06-19-84	Reactor Protection System	Reactor High Pressure Switches	Recalibrated pressure switches that had drifted high. (LER 84-023)
06-30-84	Standby Diesel Generators	Diesel Generator 1G-21	Replaced scavenging air blower, blower drive gears and coupling, and turbocharger. Performed engine and generator inspections.  (LER 84-021)

. . . . Docket No. 050-0331 Unit Duane Arnold Energy Ctr Date July 15, 1984 Completed by Ken S. Putnam Telephone 319-851-7456 REFUELING INFORMATION 1. Name of facility. A. Duane Arnold Energy Center Scheduled date for next refueling shutdown. 2. A. January, 1985 (Tentative schedule) Scheduled date for restart following refueling. 3. A. April, 1985 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. Scheduled date(s) for submitting proposed licensing action and 5. supporting information. July, 1984 Important licensing considerations associated with refueling, e.g., new 6. 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 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 July, 1984
Completed by Ken Putnam
Telephone 319-851-7456

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

06-01-84 Reactor in cold shutdown. Outage for repair of main steam
Isolation valves continues.

At 1613 hours a fire alarm was received as a result of minor smoke

produced when the motor for the "A" river water supply pump burned out.

06-03-84 At 1750 hours the reactor water cleanup system isolated due to a spurious electrical signal. Similar spurious isolations occurred on 06-05-84 and 06-06-84.

(LER 84-019)

06-07-84 At 1146 hours the reactor was critical. Multiple criticalities were achieved for operator training while awaiting the completion of repairs to the main generator due to a hydrogen seal leak.

06-13-84 At 1902 hours the reactor was critical.

06-14-84 At 0245 hours the HPCI turbine exhibited slower than usual fast start times. Additional testing and inspection demonstrated HPCI turbine operablility by 1150 hours.

At 1348 hours the reactor was driven subcritical for drywell inspection. AT 1615 hours the reactor was again critical.

06-15-84 At 0819 hours the generator was put on line.

06-16-84 AT 0106 hours the "A" reactor feed pump tripped due to an oil line orifice sizing problem.

06-17-84 At 1707 hours a standby filter unit tripped on a spurious high radiation signal. The unit tripped again at 1725 hours. A lightning storm is believed to have caused the spurious signals. (LER 84-020 pending)

At 2055 hours the "B" standby diesel generator tripped during testing due to failure of the scavenger air blower. The "B" diesel genrator was declared inoperable commencing a 7 day LCO. (LER 84-021)

O6-18-84 A personnel error was discovered which had left a breaker tripped on the "B" river water supply screen-wash-pump for the previous 3 days. (River water supply system continued to supply Tech. Spec. required flow in both loops throughout this period.)

06-19-84 AT 1537 hours a spurious one-half Group III primary containment isolation occurred with initiation of one standby gas treatment system.

(LER 84-022 pending)

Three out of four RPS reactor high pressure switch setpoints were found drifted high during surveillance testing.

(LER 84-023 pending)

06-20-84 The first of four shipments of Cycle 8 fuel bundles was received on-site. The next three shipments were received by 06-29-84.

At 1346 hours a conductivity element in the demineralization sample system was declared inoperable as a result of conservative drifting. A 30-day LCO was commenced.

At 1643 hours the "A" side standby filter unit initiated on a spurious high radiation signal.

(LER 84-020 pending)

06-24-84 The replacement scavenger air blower for the inoperable "8" standby diesel generator was found rubbing. As the delay in repairs to the diesel generator would exceed the time limit set by the 7-day LCO, a controlled shutdown was commenced. At 1711 hours an Unusual Event was declared due to the initiation of a shutdown required by Technical Specifications.

At 2055 hours a 24-hour LCO commenced due to the inoperability of the standby diesel generator for 7 days.

06-25-84 At 0801 hours the main generator was taken off-line.

At 0907 hours the reactor was subcritical.

At 1655 hours the head vents were opened, placing the reactor in cold shutdown ending the 24-hour LCO and the Unusual Event.

06-30-84 At 0642 hours the reactor was critical. At 1030 hours the reactor was driven subcritical for drywell entry and inspection.

At 1333 hours a spurious signal caused the isolation of the reactor water clean-up system.

(LER 84-024 pending)

At 2212 hours the main generator was placed on-line.

At 2400 hours the plant was operating at 45 MWe (gross) and increasing in normal plant start-up.

Iowa Electric Light and Power Company July 13, 1984 DAEC-84-445

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

June, 1984 Monthly Operating Report

Dear Sirs:

Please find enclosed 12 copies of the Duane Arnold Energy Center Monthly Operating Report for June, 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-118a, TE-5

cc: Director, Office of Inspection and Enforcement U. S. Nuclear Regulatory Commission Region III 79: 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

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