

OPERATING DATA REPORT

DOCKET NO. 050-0331

DATE 8-15-84

COMPLETED BY Ken S. Putnam

TELEPHONE 319-851-7456

OPERATING STATUS

Notes

1. Unit Name Duane Arnold Energy Center
2. Reporting Period July, 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	744.0	5111.0	83255.0
12. Number of Hours Reactor Was Critical	705.0	3733.5	59685.0
13. Reactor Reserve Shutdown Hours	0.0	150.3	150.3
14. Hours Generator On-Line	691.1	3621.6	58064.3
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1031560	5300217	73048779
17. Gross Electrical Energy Generated (MWH)	340073	1785356	24479413
18. Net Electrical Energy Generated (MWH)	319515	1681496	22920087
19. Unit Service Factor	92.9	70.9	69.7
20. Unit Availability Factor	92.9	70.9	69.7
21. Unit Capacity Factor (Using MDC Net)	83.4	63.9	53.5
22. Unit Capacity Factor (Using DER Net)	79.8	61.2	51.2
23. Unit Forced Outage Rate	7.1	17.9	17.3

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

Maintenance Outage September 28 to October 21, 1984

8408230429 840731  
PDR ADOCK 05000331  
R PDR

IE 24  
1/1

25. If Shut Down At End Of Report Period, Estimated Date of Startup: \_\_\_\_\_

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331

UNIT Duane Arnold Energy Center

DATE 8-15-84

COMPLETED BY Ken S. Putnam

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MONTH July, 1984

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	280
2	422
3	460
4	497
5	499
6	502
7	503
8	484
9	480
10	486
11	496
12	490
13	175
14	0
15	40
16	400

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	406
18	498
19	493
20	489
21	482
22	467
23	501
24	487
25	498
26	499
27	498
28	496
29	363
30	443
31	494

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 8-15-84  
 Completed by Kenneth S. Putnam  
 Telephone 319-851-7456

REPORT MONTH July, 1984

No.	Date					Licensee Event Report #			Cause & Corrective Action to Prevent Recurrence
6	07-13-84	F	52.9	H	3	LER 84-027 LER 84-028	JC FK	JC-PS	Jarred instruments resulted in spurious high reactor pressure signals and resultant scram. During startup degraded voltage offsite power grid resulted in a second scram.
7	07-29-84	S	0	H	1	None	-	-	Rod manipulation required reduction in power to 50%. Rate of increase in power was limited by the preconditioning process. Computer difficulties with the periodic core performance summary report delayed the preconditioning process.

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)  
 5 Exhibit 1-Same Source

MAJOR SAFETY RELATED MAINTENANCE

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

DATE	SYSTEM	COMPONENT	DESCRIPTION
07-02-84	RCIC	Drain Pot Bypass Valve CV-2409	Steam leak. Valve repacked.
07-12-84	Diesel Fire Pump	Pump Minimum Flow Valve PSV-3300	The seat of the valve was machined to stop leakage.
07-12-84	Standby Filter Unit	Damper Positioners AV-7318A and B	Replaced positioner. (LER 84-026)
	Standby Filter Unit	Radiation Monitor 6101A	Repaired internal electronics. (LER 84-026)
07-26-84	Torus to Reactor Building Vacuum Breaker	Air line to CV-4304	Leaking instrument air line replaced.

Docket No. 050-0331  
Unit Duane Arnold Energy Ctr  
Date August 15, 1984  
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Telephone 319-851-7456

REFUELING INFORMATION

1. Name of facility.  
A. Duane Arnold Energy Center
2. Scheduled date for next refueling shutdown.  
A. February, 1985
3. Scheduled date for restart following refueling.  
A. May, 1985
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?  
Yes.  
A. Reload license submittal.  
B. Additional MAPLHGR curves for new fuel bundles being introduced for Cycle 8.
5. Scheduled date(s) for submitting proposed licensing action and supporting information.  
August, 1984
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 August 15, 1984  
Completed by Kenneth Putnam  
Telephone 319-851-7456

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

- 07-01-84 Normal plant operation at 45 MWe (gross) and increasing.
- 07-03-84 At 0535 hours, testing of the "A" Standby Liquid Control pump found the flow rate apparently less than required. A 7-day LCO was declared. The "B" SBLC pump was similarly tested and also found to apparently fail the flow rate requirements. A 24-hour LCO was entered at 1717 hours and an Unusual Event was declared. At 2140 hours the "A" pump was found operable with the "B" pump isolated ending the 24-hour LCO.
- 07-04-84 At 0250 hours a Drywell to Torus vacuum breaker CV-4327G was declared inoperable when it failed to close immediately. CV-4327G was closed within 45 minutes and increased surveillance of operable vacuum breakers was initiated.
- 07-05-84 Both Standby Liquid Control pumps satisfactorily met the flow rate requirements ending the 7-day LCO at 1247 hours. A clerical error in the calculations of the procedure had caused the test failure. Both pumps were operable.
- 07-09-84 The Diesel fire pump (1P-49) failed to meet the required discharge flow rate and pressure requirements. A 7-day LCO commenced at 0203 hours.
- 07-10-84 At 0430 the "A" Standby Filter Unit for Control Room habitability initiated on a spurious high radiation signal.  
(LER 84-020)
- (LER 84-026) The radiation detector on the "B" Standby Filter Unit would not calibrate properly. A 7-day LCO began at 0820 hours.
- 07-11-84 The Diesel Fire Pump was declared operable at 2238 hours, ending the applicable 7-day LCO.
- 07-12-84 The "A" Standby Filter Unit was declared inoperable when its discharge damper (AV-7318A) would not open. A 24-hour LCO and an Unusual Event commenced at 0015 hours due to both Standby Filter Units being technically inoperable. At 0130 hours the "B" Standby Filter Unit was placed in the tripped condition thereby fulfilling its safety function and ending the 24-hour LCO and Unusual Event. At 1355 hours repair of the "A" SFU was completed.  
(LER 84-026)



Docket No. 55-0331  
Unit Duane Arnold Energy Ctr  
Date August 15, 1984  
Completed by Kenneth Putnam  
Telephone 319-851-7456

NARRATIVE SUMMARY OF OPERATING EXPERIENCE (Cont)

- 07-13-84 At 0902 hours the reactor scrambled on a spurious high reactor pressure signal caused by a jarred instrument rack.  
(LER 84-027)
- 07-14-84 At 0124 hours the reactor was critical. At 0450 hours a leak was discovered in the Air Ejector Room and shutdown of the reactor was commenced for repair. At 1524 hours, during startup, the reactor scrambled as a result of a degraded voltage condition in the offsite power grid. At 1620 hours with the grid stability restored, plant loads were transferred from the Diesel Generators to the Startup Transformer and startup commenced.  
(LER 84-028)
- 07-15-84 At 0530 hours the reactor was critical. At 1555 hours the main generator was synchronized to the grid.
- 07-17-84 The "B" recirculation pump M-G set tripped on low lube oil pressure as a result of a breaker not being fully racked in. Reactor power was reduced and two loop flow restored shortly thereafter.
- 07-18-84 At 1530 hours a common suction line valve was found closed on the Standby Liquid Control System. An incorrect valve had been inadvertently closed during surveillance testing at approximately 1045 hours. This resulted in an entry into a 24-hour LCO and an Unusual Event. The valve was immediately restored to the proper position and the Standby Liquid Control valve lineup was verified.  
(LER 84-029)
- 07-26-84 At 1103 hours the air to a Torus to Reactor Building vacuum breaker CV-4304 was isolated causing the valve to fall open. A redundant valve maintained containment integrity. A 7-day LCO was commenced for the inoperability of the vacuum breaker. At 1430 hours repairs were completed and the vacuum breaker was tested satisfactorily, ending the 7-day LCO.
- 07-31-84 Normal plant operation at 534 MWe gross.

Iowa Electric Light and Power Company

August 15, 1984  
DAEC-84-515

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

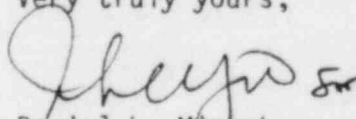
Attn: Document Control Desk

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

Dear Sirs:

Please find enclosed 12 copies of the Duane Arnold Energy Center Monthly Operating Report for July, 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. Mudeck  
Plant Superintendent - Nuclear  
Duane Arnold Energy Center

DLM/KSP/kp\*  
Enclosures  
File A-118d, TE-5

cc: Director, Office of Inspection  
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