

CORRECTED

OPERATING DATA REPORT

Revision 1 to Report
Dated March 15, 1983

DOCKET NO. 050-0331

DATE May 13, 1983

COMPLETED BY William Miller

TELEPHONE 319-851-7238

OPERATING STATUS

Notes

1. Unit Name Duane Arnold Energy Center
2. Reporting Period February, 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:

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	672.0	1416.0	70800.0
12. Number of Hours Reactor Was Critical	266.7	1010.7	51267.0
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	266.7	1010.7	49945.9
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	311704.8	1197936.0	61567456.0
17. Gross Electrical Energy Generated (MWH)	105698.0	410045.0	20624962.0
18. Net Electrical Energy Generated (MWH)	98211.3	381909.5	19296181.9
19. Unit Service Factor	39.7%	71.4%	70.5%
20. Unit Availability Factor	39.7%	71.4%	70.5%
21. Unit Capacity Factor (Using MDC Net)	28.4%	52.4%	52.9%
22. Unit Capacity Factor (Using DER Net)	27.2%	50.1%	50.7%
23. Unit Forced Outage Rate	0.0	0.0	17.5
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			
Refueling commenced on February 11, 1983			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: April 25, 1983

*Turbine Rating: 565.7 MWE

Generator Rating: 663.5 (MVA) \times $\cos \phi$ (Power Factor) = 597 MWE

8305180349 830513
PDR ADOCK 05000331
R PDR

(9/77)

CORRECTED

OPERATING DATA REPORT

Revision 1 to Report
Dated April 15, 1983

DOCKET NO. 050-0331

DATE May 13, 1983

COMPLETED BY Matt Andersen

TELEPHONE 319-851-7308

OPERATING STATUS

Notes

1. Unit Name Duane Arnold Energy Center
2. Reporting Period March, 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:

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	2160.0	71544.0
12. Number of Hours Reactor Was Critical	0.0	1010.7	51267.0
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	0.0	1010.7	49945.9
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	1197936.0	61567456.0
17. Gross Electrical Energy Generated (MWH)	0.0	410045.0	20624962.0
18. Net Electrical Energy Generated (MWH)	0.0	381909.5	19296181.9
19. Unit Service Factor	0.0%	46.8%	69.8%
20. Unit Availability Factor	0.0%	46.8%	69.8%
21. Unit Capacity Factor (Using MDC Net)	0.0%	34.3%	52.4%
22. Unit Capacity Factor (Using DER Net)	0.0%	32.9%	50.1%
23. Unit Forced Outage Rate	0.0	0.0	17.5

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

Refueling commenced on February 11, 1983

25. If Shut Down At End Of Report Period, Estimated Date of Startup: April 25, 1983

*Turbine Rating: 565.7 MWe

Generator Rating: 663.5 (MVA) x .90 (Power Factor) = 597 MWe

OPERATING DATA REPORT

DOCKET NO. 050-0331

DATE 5-13-83

COMPLETED BY Matt Andersen

TELEPHONE 319-851-7308

OPERATING STATUS

1. Unit Name Duane Arnold Energy Center
2. Reporting Period April, 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	719.0	2879.0	72263.0
12. Number of Hours Reactor Was Critical	0.0	1010.7	51267.0
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	0.0	1010.7	49945.9
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	1197936.0	61567456.0
17. Gross Electrical Energy Generated (MWH)	0.0	410045.0	20624962.0
18. Net Electrical Energy Generated (MWH)	0.0	381909.5	19296181.9
19. Unit Service Factor	0.0%	35.1%	69.1%
20. Unit Availability Factor	0.0%	35.1%	69.1%
21. Unit Capacity Factor (Using MDC Net)	0.0%	25.8%	51.8%
22. Unit Capacity Factor (Using DER Net)	0.0%	24.7%	49.6%
23. Unit Forced Outage Rate	0.0	0.0	17.5

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

Refueling commenced on February 12, 1983

25. If Shut Down At End Of Report Period, Estimated Date of Startup: May 5, 1983

*Turbine Rating: 565.7 MWe

Generator Rating: 663.5 (MVA) x .90 (Power Factor) = 597 MWe

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 050-0331UNIT Duane Arnold Energy CenterDATE May 13, 1983COMPLETED BY Matt AndersenTELEPHONE 319-851-7308MONTH April, 1983

DAY AVERAGE DAILY POWER LEVEL

(MWe-Net)

1	<u>0</u>
2	<u>0</u>
3	<u>0</u>
4	<u>0</u>
5	<u>0</u>
6	<u>0</u>
7	<u>0</u>
8	<u>0</u>
9	<u>0</u>
10	<u>0</u>
11	<u>0</u>
12	<u>0</u>
13	<u>0</u>
14	<u>0</u>
15	<u>0</u>
16	<u>0</u>

DAY AVERAGE DAILY POWER LEVEL

(MWe-Net)

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>

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 May 13, 1983

REPORT MONTH April, 1983

Completed by Matt Andersen

Telephone 319-851-7308

No.	Date	Type ¹	Duration (hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
5	830212	S	719.0	C	1	N/A	N/A	N/A	Scheduled refueling shutdown (since Feb. 12, 1983)

1

F: Forced
S: Scheduled

2

Reason:
A-Equipment Failure(Explain)
B-Maintenance of 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

Docket No. 055-0331
Unit Duane Arnold Energy Ctr
Date May 13, 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 (Note - current refueling outage will extend through May 5, 1983)
3. Scheduled date for restart following refueling.
A. May 5, 1983
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

None currently identified (All license amendments required for startup for Cycle 7 operation have been approved.)
5. Scheduled date(s) for submitting proposed licensing action and supporting information.

All outstanding amendments and supporting information has been submitted.
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 May 13, 1983
 Completed by Matt Andersen
 Telephone 319-851-7308

DATE	SYSTEM	COMPONENT	DESCRIPTION
4-1-83 to 4-27-83	RHR, RCIC, HPCI, Aux. Heating, RHR Service Water, Reactor Water Cleanup, Core Spray, Nuclear Boiler and Condensate Demin. Water	Snubbers	Snubber replacement continued (RO 83-08) (RO 83-10)
4-4-83 to 4-27-83	CRD Hydraulic	Nitrogen pressure gage isolation valves, HCU accumulator pressure gage	Cartridge valves replaced with rebuilt valves (25 total) and 2 gages replaced.
4-5-83	RPS	CR105X Auxiliary Contacts	Replaced auxiliary contacts on RPS scram relays per NRC Commitment. (Bulletin 78-05)
4-7-83	125 Volt DC "B" Battery	Cell #16 and #46	Replaced both cells with new cells.
4-12-83	Reactor Recirculation	CV-1804A	Lapped seat and disc, replaced gasket.
4-12-83	Containment Atmospheric Control	CV-4300	Replaced "T" ring and "O" ring to satisfy NRC Commitment LDR-82-078.
4-12-83 to 4-26-83	Neutron Monitoring	LPRMs and APRMs	2 LPRM detectors and 2 LPRM function switches replaced. APRM A & D repaired.
4-14, 4-15-83	Neutron Monitoring	IRM A, E	Drive tube and detector replaced. (RO 82-048, 49 Update pending)
4-19-83	Various (See narrative experience)	Valves	Repair of valves following local leak rate testing per 10 CFR 50, Appendix J.
4-22-83	RPS	Cable	Old cable in 1C-15 replaced with new cable.
4-25-83	RHR	Pump Discharge Check Valves	Tack weld on V-20-1 found broken. Setscrew replaced and tack welded. Previous similar problems on 3 of 4 RHRSW pump discharge check valves (system operability was not affected)

NARRATIVE SUMMARY OF OPERATING EXPERIENCE

4-1-83 Plant in Refuel Mode, all fuel removed from vessel.

4-4-83 Suspended fuel movement due to "A" IRM determined to be not fully inserted. ("D" and "E" IRMs were inoperable at this time).

4-5-83 "A" IRM determined operable following evaluation.

4-8-83 Reactor scram @ 0758 during design change problems. @ 1417 reactor scram from APRM A & B (LPRM 32-33-3A failed upscale).

4-9-83 1813 Core fully reloaded and core verification commenced. 1950 reactor in Shutdown Mode.

4-10-83 Core verification completed satisfactorily. Fuel pool to reactor cavity gates installed.

4-11-83 Secured draining reactor cavity, separator being lowered into cavity.

4-12-83 Steam dryer in place.

4-13-83 Reactor head in place, commenced raising reactor vessel water level to flange.

4-14-83 "E" IRM returned to operable status.

4-19-83 Integrated Leak Rate Test completed satisfactory (2 MSIVs, Drywell Water Cooling Water Supply A and B side control valves, Drywell and Torus Nitrogen Makeup valve CV-4311, Steam Line Drain Valves MO-4423 and MO-4424, RCIC Steam Supply Valves MO-2400, MO-2401 and Standby Liquid Control check valve V-26-9 were repaired following LLRT).

4-26-83 @ 0150 while switching mode switch from Refuel to Shutdown, "A" channel did not trip (scram), inserted full scram manually. Reset scram then manually scrambled "A" again.

RO 83-12

4-28-83 Control Rod 26-07 was pulled and replaced and coupling verified. Rod previously was giving overtravel indication and appeared to be uncoupled.

4-29-83 @ 0102 Full scram occurred. After receiving 1/2 scram on A side and A RPS MG set tripped, the A RPS was transferred to alternate supply and the full scram occurred. Upscale trip on B APRM caused the full RPS trip.

0359 Reactor Scram due to reactor low level signal.

4-30-83 Refueling outage continuing.